

# AMERICAN RAILROAD JOURNAL.

## STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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### American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., NO. 9 SPRUCE ST.

New York, Saturday, February 3, 1855.

#### Ohio and Pennsylvania Railroad.

The Directors of this Company have made a report of their operations for the year ending 31st December last. The income for the year was Passengers..... \$684,756 08 Freight..... 426,870 10

\$1,111,626 18

Transportation expenses for the same time..... 449,508 87

Leaving as net gain..... \$662,117 31

The gross earnings for 1853 were. \$668,044 49 so that those of the past year show an increase over the preceding one of 66 per cent. The transportation expenses for the present year have only amounted to about 45 per cent. of the gross earnings; and the net earnings show a profit of about eleven per cent. on the cost of the road with its present equipment, one half of which is represented by bonds bearing interest at seven per cent per annum.

The report states that the company have suf-

fered less than usual from the effects of last year's depression; the only serious injury sustained having arisen from other connecting roads, as the Ohio and Indiana, which was prevented from being opened as soon as anticipated. That difficulty, however, had been surmounted, and the Ohio and Indiana Railroad opened through to Fort Wayne, at the beginning of November.

The Directors, acting under instructions, had purchased 4,000 tons of iron for laying a portion of the line with a double track. One-half of this had been sold to the Ohio and Indiana company, for which the latter party had given their bonds, and thus a most important connection was helped forward towards completion. Pittsburg is now in direct communication with Fort Wayne, and an active trade has already sprung up between the two cities.

Operations had also been carried on in erecting a bridge across the Alleghany river, a contract having been entered into with responsible parties for that purpose. By authority from the stockholders, the directors had taken stock in the Fort Wayne and Chicago Railroad on satisfactory conditions. The opening of this important link, securing a direct communication between Chicago and Pittsburg and Philadelphia, was expected to be of the greatest advantage in promoting the prosperity of the road. The directors were also authorized to take such action as they might think best for the construction of a branch road from Brighton to New Castle. The length of the line was ascertained to be about 20 miles, and its cost \$500,000. After mature consideration, the directors had considered that it was inexpedient to prosecute this work further at present. To the stock of the Springfield, Mt. Vernon and Pittsburg Road they had, however, being authorized by the stockholders, subscribed \$400,000, of which \$62,500 had been paid at date of previous annual meeting. Since that time nothing has been paid, because the work had been suspended on that part of the road to which the subscription was applicable. About 50 miles of this road are completed, and it is expected to be an important feeder when opened throughout.

The length of the Ohio and Pennsylvania road is 187 miles, and including side-lines and double track, 216½ miles. Considerable work has been

done along the line in putting up permanent substantial bridges, side-tracks, water-stations, platforms and other accommodations; so that the road is now stated to be in excellent running order.

The present number of locomotives is 42, being an increase of 11 during the year. The engines are all first class. Important additions have been made to the other rolling stock; but more freight cars are still needed. The amount paid for equipments during the year was \$222,263 80. During the Fall their equipment was over-worked. There could have been full employment for 50 engines. This large increase of business involved a heavy expenditure to accommodate it, and the amount of bills payable had consequently risen from \$249,715 to 437,805. In addition to equipment, the necessity of completing the road to Pittsburg is pointed out. For this last purpose the Pennsylvania Railroad Company have subscribed \$150,000. A considerable amount of income bonds have been converted into stock during the year. The stock now amounts to \$2,451,700; while its nominal limit is \$3,000,000, with permission to the stockholders to increase it to double that sum.

#### STOCK ACCOUNT.

27,994 shares of \$50 each held by individuals.....	\$1,399,700
6,000 do. do. do. Penn. R. R. Co.....	300,000
8,000 do. do. do. Alleghany city.....	400,000
2,440 do. do. do. Stark Co., Ohio.....	122,000
4,000 do. do. do. City of Pittsburg.....	200,000
600 do. do. do. Richmond Co., Ohio.....	30,000

49,034 shares..... \$2,451,700

#### BOND ACCOUNT.

Amount Mortgage Bonds due 1st January, 1855.....	\$1,750,000
Income Bonds due April.....	1,469,000

Total Convertible Bonds.....	\$3,219,000
Total Stock issued.....	2,451,700

\$5,670,700

As the whole stock authorized by law is \$6,000,000, this leaves a balance of \$329,300 which may be yet issued.

A dividend of four per cent. in cash was declared by the Directors last July. This would have been followed by another at least as large, but for the failure of their Treasurer, Wm. Larimer Jr. of Pittsburg, with whom the earnings of the road

had been deposited to the amount of \$95,628. How much of this may be recovered is unknown. Notwithstanding this loss, however, the large earnings of the road have been sufficient to pay the interest on the company's debts, and declare a stock dividend of five per cent. besides carrying a balance of \$50,000 to the next half year.

PUBLIC MEETING.

At a meeting of the stockholders, held on the 25th ult., after organizing and accepting of the report, the following resolutions were put and carried, viz:

On motion of Mr. Lanier of N. Y., it was

*Resolved*, That the stockholders hereby instruct the Directors not to construct any branch road, nor to make any additional subscription to the stock of any other company, nor to give any aid to any other road, without the consent of the stockholders, previously obtained at a regular annual meeting, and after thirty days' notice, by newspaper publications, in Pittsburgh, Philadelphia and New York.

*Resolved*, That the Directors are hereby instructed to prevent any new expenditures on account of construction, except such as may be absolutely necessary for the accommodation of the business of the road, and for work already begun under authority of resolutions heretofore passed by the stockholders,—any further work on the second track to be suspended. This prohibition to continue until otherwise ordered by a vote of the stockholders, on due notice, to be given them to that end.

WHEREAS, In the opinion of the stockholders, it is advisable that the Board of Directors shall provide a sinking fund, to retire, as fast as possible, the principal of the Income Bonds of the company. Therefore we recommend to the Board as follows:

That they set apart, and irrevocably pledge, for the purpose aforesaid, the following assets of the company, viz:

The Mortgage Bonds of the Ohio and Indiana Railroad Company, now held by this company,—\$305,000.

Stock held by this company, and paid for, in the Ohio and Indiana Railroad Company,—\$100,000.

And the further sum of \$50,000, per year, out of the revenues of the road, to be paid over to the trustees half-yearly, that is on each first day of February, and first day of August, 1856, and of each succeeding year, until the said income bonds be paid off. That it be recommended to the Board of Directors to appoint some suitable Trustee or Trustees, to carry out the intent and meaning of these instructions; that the Trustees be instructed to advertise, half-yearly, in at least two newspapers in the city of New York, and two in the city of Pittsburgh, that they will receive proposals for the purchase of Income Bonds to the extent of the money on hand for that purpose, and they shall invest the Trust money in the manner aforesaid, by purchasing the Income Bonds, at the lowest rates offered, not exceeding par.— We also recommend to the Board of Directors, that whenever the Trustees shall purchase Income Bonds, with the Trust money, as aforesaid, to the amount of five per cent. on the capital stock of the company, a stock dividend of five per cent. shall be made to the shareholders, out of the same, and so on from time to time, as that amount may accumulate in the hands of the Trustees thereafter.

*Resolved*, That the Board of Directors of the company, may, in their discretion, issue and sell the Income Convertible Bonds of the company, to the extent of two millions of dollars, in all, including what are already issued, should they deem it expedient and proper to do so, for the purpose of paying the debts of the company, but that they be prohibited from making an issue beyond the two millions of dollars.

Railroads of New York.

REPORT OF THE STATE ENGINEER.

State Engineer and Surveyor's Office, }

ALBANY, Jan'y 23rd, 1855. }

Within a few years past the railway interest has become one of the most important in this country, not only on account of the large pecuniary investments which have been made therein, but also on account of the effect which its development has had in increasing the value and changing the relations of property, trade, commerce, and in modifying the social conditions of our people.

These varied interests and the new circumstances which have been called into existence by the vast and rapid expansion of the railway system, have required additional legal enactments, from time to time; but the same supervision and restraints of law which are considered necessary to guard and protect other public interests, have not been imposed upon this one to an extent commensurate with its increasing importance.

Almost the entire passenger travel of the country and the mail service are now performed by railroads, while at the same time the advantages which they afford for the conveyance of some classes of freight, exclusively, and of others in part, have rendered them one of the most important elements in our social progress, and have made it still more important to secure in their construction and management all of the advantages to which the public are entitled by the surrender of a portion of their primary rights.

The railroad corporations, in which there is a larger investment than in the banks, over which the law exercises supervision, are permitted to control an immense amount of capital and interests of the greatest magnitude, with no other check than is afforded by an annual statement of their affairs, notoriously incorrect, and in many cases made so systematically, for the purpose of concealing from the stockholders and the public violations of law and want of fidelity to their trusts.

The present appears to be the most fitting time to investigate the errors of the past, and to suggest remedies against their recurrence, for in the general depreciation of this interest, and in the doubt which now exists in many minds in regard to their success, admonitions and suggestions will be considered which would have been wholly disregarded in more prosperous times.

The existing laws have devolved upon no other department of the government, except this one, any duty connected with our railroads; and, therefore, I may be pardoned for extending my remarks and investigations to the subjects which do not strictly belong to my profession.

One of the best guarantees for the faithful performance of duty that can be given to the public and the stockholders by railroad managers, is to render, at frequent intervals, full and accurate statements of the results of the operations of the works, and of the manner in which these officers have discharged their trusts.

It is not difficult to demonstrate that the publication of such ample statements, in the long run, does not injure the interests of any corporation, and that it is the most certain security against malversation in the administration of its affairs.

Under the General Railroad Act of 1850, each of these corporations is required to make an annual report to the State Engineer and Surveyor in the form prescribed, showing its financial condition and cost, its length, and other characteristics; the business done during the year, and the expense thereof; a statement of the receipts and payments, and a list of the accidents which have occurred involving injury to life or limb; and the officer is required to arrange the information thus furnished, and submit it, together with the reports, to the Legislature.

It was evidently the intention of the Legislature, in requiring these reports to be submitted to the State Engineer, that he should give them such examination as would enable him not only to determine whether they had been made in con-

formity with law, but also to furnish the Legislature with such deductions therefrom as he was enabled to make from his more intimate and professional acquaintance with the subject.

My predecessors have all complained of the evident and well known inaccuracies which these reports from the railroad corporations contain, and in submitting the present reports, I take this opportunity to express my conviction, derived from an examination of them, of those which have been heretofore submitted, of the reports of railroads in other States, and from my own experience, that no reliance whatever can be placed upon any general conclusions as to the cost or profit of railroad transportation as exhibited by these reports, while many of them contain errors which cannot be attributed even to carelessness.

In the following I shall have occasion to point out some of these errors.

While the State has thus left this class of corporations free from the supervision and restraints which she has imposed upon other great interests, and has only required from them annual statements of certain portions of their affairs, prepared by their own officers, it will be seen that this simple duty has been frequently omitted or reluctantly and imperfectly performed, and has often been used by those officers to conceal instead of exhibiting the true state of affairs.

In the last annual report from this department it was stated that several of the corporations had not made the annual reports required by law; among them were two upon which the most stupendous frauds have been recently discovered. If the State Engineer, or some other public officer, had been authorized by law to compel the submission of these reports, and had also been authorized to investigate their accuracy, it is very certain that the frauds would have been discovered at an earlier day, and it is not improbable that the mere existence of such authority would have limited the extent of these frauds, while its exercise would have prevented their commission wholly or in part, and have thus saved the innocent stockholders from immense loss, and the monetary confidence of the community from a severe shock.

Much discussion has been had on the classification of expenditure between the accounts for operating and constructing railroads, and it has been questioned whether current expenses contain a sufficient allowance for the renewal of the depreciation of the works.

The establishment of every new line of road will continue to develop new sources of business from year to year for a considerable period after it has been opened, which will require an increased outlay for additional side tracks, depot buildings, and equipment.

The cost of these items is a legitimate charge against construction.

It has also been found that an annual expenditure is required for several years after a new road has been opened, for the purpose of restoring the slopes of the cuttings, embankments and drains, and of perfecting the works.

Until the cuts have been made, the embankments built and the water-ways opened for some considerable period; the necessary slopes and dimensions cannot in all cases be determined, and hence during their construction they are usually made of the least dimensions, and must subsequently be enlarged, modified and protected, in many places.

It has been questioned whether the expense of these items is a proper charge to construction or to the cost of operating.

It should be observed that the items of cost above mentioned have been spoken of as arising from incomplete construction, and as of annual occurrence for only a limited period, say for three or four years, and that they differ materially from expenses which are for nearly similar objects, but which are dependent upon the use of the works, or which arise from the natural decay, and also from those which are of annual occurrence without limit as to time.

The latter are all evidently charges which belong to the cost of operating, while the former may with strict propriety be charged as capital, and in estimating the cost of railroads, and the anticipated revenue and dividends, both of these classes of items must be provided for.

It may be remarked, in this connection, that these charges against construction arise mainly because railroads are opened for use before they are properly constructed.

It will be observed, that none of the returns of the railroad corporations of this State comply with the law in stating the amount of depreciation of the works and rolling stock. The returns of railroads of Massachusetts in most cases show a small allowance made for depreciation of the iron rails, engines and cars.

It is concluded by many skilful managers that if the works and rolling stock are kept in thorough repair, that they are in as good condition at the end of each year as they were at the end of the preceding year, and therefore that there can be no depreciation.

The difficulty lies in determining the fact whether the repairs have been kept up in this thorough manner.

The expenses for repairs of iron rails, after allowing for the value of the old material, is equal to the cost of an entire renewal once in fourteen years, that for cross ties to a renewal once in eight years, for wooden bridges once in ten years, and wooden stations once in thirty years. This deterioration may be represented in another form by stating it as equal to from two to four per cent. annually on the whole cost of the road.

An examination of the reports for several years past will show that no such allowance for depreciation could have been included in the expense of maintenance of the way and works of our railroads, and as all of our roads have kept their construction accounts open, it is not unlikely that a portion of the expenses of depreciation has found its way into this account. An allowance of one per cent. per annum on the whole cost of the roads in this State would, in my opinion, be required to make up the omission in the reports or the proper allowance for depreciation. [An instance of the casuistry of the arguments sometimes used for the classification of the expenditures between the accounts of construction and the running expenses, was exhibited by the charge to construction for the value of a cow killed by a freight train, and the damage done to the train and road; because the cow got upon the track in consequence of the fence not being built, and hence it was argued that as the accident arose in consequence of incomplete construction, the damage done should be charged to that account.]

Railroads are subject to one item of expense which I have never seen directly stated, viz: the necessary substitution of improvements in the way and works before the original ones have been worn out by use.

In manufactorys many substitutes for the machines used in labor-saving processes must be made to enable the manufacturers to compete successfully with their rivals using such improved forms of machinery.

We observe that on our rivers and lakes companies are compelled almost every year to lay aside a steamer that was considered a floating palace a few years before, and build a new one, still more magnificent, to enable it to compete successfully with its rivals.

The railroad, considered as a machine, is of recent invention; its power, capacity, and endurance have not even yet been fully ascertained. As the two former are developed, the substitution of improved forms of increasing its efficiency either in capacity, speed, or economy, becomes necessary; and these substitutions are more extensive than they are in other machines of older date and use.

A brief statement of some of the most prominent of these substitutions may be alluded to, before an opinion is expressed of the allowance ne-

cessary to be made to the expense of railroads under this head.

The superstructure of some of the earlier of the modern railroads was made by placing a thin flat bar of iron on longitudinal timbers, which rested on stone blocks, protected from displacement by frost by filling the trenches below them with small broken stone. In some cases the iron bar was placed on continuous stone sills.

The first change made was the substitution of bars of greater thickness; then succeeded the T rail of nearly the present form, weighing fifty pounds per lineal yard, resting on longitudinal sills; subsequently, the weight of the iron rail was successively increased to sixty, seventy and seventy-five pounds; cross-ties were used, which were placed on longitudinal sills, and finally these sills were removed, and gravel ballasting substituted.

The first cars used were coach bodies of the ordinary form placed on four-wheeled frames; afterwards the bodies were enlarged and the form changed, and finally the bodies were adapted to contain sixty passengers, placed on two separate trucks, attached loosely to the bodies so as to permit them separately to adapt themselves to the curves and inequalities of the track.

The motive power at first was horses, and on steep inclination stationary steam power.

The first locomotive engines used weighed but six tons, and these have been successively increased to ten, sixteen, twenty and twenty-six tons, while on some of the freighting roads engines of forty tons weight (including the tenders) have been introduced.

The foregoing list of changes shows how imperfect a machine the railroad was when many of them in this country were first commenced, and how many radical changes have been necessary in the construction of their ways and works.

The present state of perfection in the machine renders it probable that new substitution of its important and expensive parts will annually become rare, but yet it may be safely assumed that some expenses of this character will continue to accrue, and must be provided for in estimating the cost of our railroads or their value as an investment.

The experience of some of the older railroads for a considerable period, proves that the substitution of the character mentioned has cost a sum equal to from one to two per cent. per annum on the original cost of the road.

The interests which call for the protection of the government are:—

First. That of the public at large in the safe construction and management of railroads, and in their adaptation to convenient and economical use for travel and trade.

Second. That of the stock and bondholders in the faithful application of their investments and management of their property.

Much injury has been caused to both of these interests by the defective construction and premature opening of many of our railroads. The most serious accidents, involving the destruction of both life and property, have been caused by opening them for public travel before they have been fully completed, or when they have been imperfectly built. The public have no means of ascertaining the condition of these works, and are compelled to jeopard their lives and property upon them, without any assurance that their safety has been provided for by secure structures and vehicles, sufficient rules and precautions, and judicious and experienced managers and employees.

Before any road is used by the public it should be subjected in all its parts to the careful examination of some responsible public officer, who should also determine whether proper provisions and regulations have been established to prevent accidents.

Under the second head the same power of supervision and examination by public officers should be given as those which are now extended over other corporations, and authority to compel

the publication of full and authentic statements of their condition and operations.

The present depreciation in the railway interest may be chiefly attributed to the diminished rates of fares and the increased expenditures for operating and enlarging the works.

The charges for transportation have been reduced to the present low rates from a mistaken opinion that it was necessary to show to the public large receipts, to accomplish which it was necessary to enter into a competition with rival roads and water lines, which was carried to an injurious extent; in consequence of the fallacious statements of the expenses of transportation which the published reports exhibited.

These reports, by exaggerating the net profits of the business, have prevented the managers, even when they discovered the error, from increasing their charges to compensating rates by the fear of public opinion and legislative interference.

Upon any given line of railroad there is a certain amount of travel and freight which would, in any event, be transported by it in preference to the water lines.

In almost every case the capacity of a well equipped single track road, provided with frequent passing places and a telegraph for its exclusive use, would be sufficient for the performance of this legitimate business, which, if economically conducted, would yield the maximum profit which could be earned, and would, in most cases, be ample to assure either an immediate or an early profitable return for the investment.

To divert from other roads any of this class of business requires a reduction in the charges, which must necessarily be extended further than merely to that portion which is diverted, and as the rate of cost of doing the business cannot be materially diminished, this reduction in the charges, is taken directly from the net profits, and it, therefore, requires a large increase of business to yield the same amount of profit as was afforded before any reduction in the charge was made.

This reduction is sometimes continued until no profit whatever is realized.

The rival road from which the business is thus diverted, will soon reduce its charges for the purpose of reclaiming its business, and feelings of rivalry will thus be engendered, which will continue the competition until the rates become so evidently unremunerative that conventions must be held to terminate the controversy and establish equitable prices and conditions; each company will then only be restored to its original position, with the disadvantage of having, in the meantime, persuaded the public that the lowest prices were sufficiently remunerative.

The alleged necessity of showing large receipts still exists, and the attempt to maintain the business diverted from rival roads being abandoned, a competition with the water lines is commenced for the transportation of the heavy and cheap articles of freight which can only be maintained by rates nearly or quite as low as those charged upon the lakes, rivers and canals, and too low, as will presently be shown, to give a fair remuneration to the railroads.

If the cost of railroad transportation could be determined with tolerable accuracy by some disinterested and official authority it would be a great step taken towards the correction of some of the most serious evils to which allusion has been made.

The sophistry of the argument that it is ever the true interest of the stockholders to increase receipts by carrying any portion of the business under cost, is too palpable to merit discussion.—The public will always look with distrust upon the management which maintains so fallacious a doctrine.

The returns of the railroad corporations show continued large additions every year to the construction account of even our oldest and best built roads. The reported increase of cost during the past year is chiefly in consequence of an extension of the double track, a larger equipment and

station facilities for the accommodation of the increased freight traffic.

The increase of the cost of the road on the New York and Erie has been twenty per cent. during the last two years, and on the Central it has been more than twenty-five per cent. during the same period.

The reported earnings and net earnings of these roads have increased by a much larger per cent. than the cost of the roads as above stated, while the reported expenses of operating have increased by about the same per centage as the earnings.

The freight earnings have increased more than the passenger earnings, but the average receipts per ton per mile have been less this year than the preceding one, especially on the Central road, although the rates of charge have been increased on both roads. The average receipts per ton per mile for the last year were two and one half cents on the Erie, and little more than three cents on the Central, while the average the preceding year on the latter was nearly three and one half cents. The freight tariff has been nearly alike on each of these roads for the last two years; it is therefore evident that the business of the Erie road embraces a larger portion than that of the Central of those articles which pay the least rates, and that the latter road has been performing a much larger proportion of its business at low rates this year than formerly.

On comparing the reported receipts, expenses and business of our three principal freighting roads, it will be seen that the passenger business on the Erie is reported as giving a net profit of forty-seven per cent., with an average charge of one and seven-tenths cents per passenger per mile; on the Central, a net profit of forty-four per cent., and a charge of one and nine-tenths cents; and on the Northern Railroad, a net profit of two per cent., with an average charge of three and seven-tenths cents per passenger per mile; and that the freight business on the first is reported as giving a net profit of fifty-one per cent., with an average charge of two and six-tenths cents per ton per mile; on the second, a net profit of forty-eight per cent., with an average charge of three and seven-tenths cents; and on the third, a net profit of thirty-four per cent., with an average charge of two and one-fourth cents per ton per mile.

The character of the business, the grades and other circumstances of these several roads, do not furnish any sufficient reasons for these discrepancies.

The actual cost of transportation upon railroads will probably never be accurately determined from their reports, until they have been run a few years with the construction account closed, and no money borrowed.

The expenses of operating the road, as stated in the reports, are about one and a quarter cents per ton per mile on the Erie, and one and six-tenths cents on the Central; but, as before stated, these reports do not show accurately the cost of this service. More reliable testimony on this subject is afforded by the recent action of the Railroad Convention. At the one held in New York, embracing the officers of the four great lines between the Atlantic and the West, a joint report was submitted by the Superintendents of the several roads, in which they state that "experience has proved that the lowest rates at which ordinary freights carried in freight trains at a speed of ten or twelve miles per hour, and in large quantities, can be carried to pay interest and expenses, will average about two cents, per ton per mile for heavy agricultural products; three cents for groceries, and four cents for dry goods." At a subsequent convention of the railroad companies of Ohio and Indiana, similar rates were adopted.

The above charges applied to the business of our two great lines would yield an average of a little less than three cents per ton per mile, and would serve to show that some of the business done on each of these roads does not even pay "interest and expenses."

Sufficient information has been elicited from Railroads of this and other States, from the actions of the conventions and from other sources of information, to warrant the belief that a considerable portion of the freighting business now done by our railroads yields no profits at the present rates, when due allowance is made for the increase of capital which it requires for the increased wear and depreciation of the works, and for the occupation of the track to the injury of the other business.

The reports of the present year show an increased expense in operating the roads over that of the preceding year. An examination of the reports of a number of railroads in New England and elsewhere, shows for the last five years an annual increase in their cost of from two to five per cent. per annum—an increase in their receipts of from twelve to twenty per cent. and an increase in their expense of from twenty to forty per cent. per annum.

The increased expense of railroad transportation is owing in part to the advancing rates of labor and materials, the increased rate of speed, the high rates of interest paid to carry the large floating debts which modern railway financiers have introduced as a part of their system, and finally to the extravagant management which has grown up among the general characteristics of the times, increased by the apparently highly prosperous condition of the railroads, the facility of borrowing money, the necessity of employing inexperienced and incompetent officers and workmen, in consequence of the great and sudden demand for this species of labor, and in some cases by the abuse of power on the part of railroad managers in using their position and the works under their charge to their personal advantage,—an example certain to be followed by the subordinates.

During the plethora of money, lines of railroad were projected by adventurers to benefit local interests, money was promised by speculators on deficient securities, and its expenditure was entrusted to agents with loose notions of beneficial trusts. The construction was conducted by engineers of little experience or judgment, and the management was seized upon by adventurers and speculators, who were determined that every item of expenditure should be arranged so as to insure to their personal profit.

The ultimate fate of roads so constructed or managed is no longer conjectural, and while their stock and securities have been swallowed up in the disasters of the times, those which have been judiciously located, and are free from the most serious of the above recited charges, will soon regain their place in the public confidence.

A radical change for the better has already taken place in the management of most of our railroads, and if the reforms which have now been commenced are thoroughly carried out, the main lines will take precedence as an investment over any other securities of aggregated capital.

Labor and materials have fallen in price, the speed of trains has been reduced, and the want of money has compelled a more economical use of it, while the suspension of dividends and temporary embarrassments have led stockholders to inquire more critically into the management of their interests.

The misfortunes of the present time are, therefore, quite likely to result in great permanent advantages.

At least three-fourths of the money which has been expended upon railroads in this country has been furnished by our citizens, and the remainder (chiefly for bonds) has been obtained from foreign investments.

The prosperous condition of all interests for the last ten years has yielded large surplus profits, which have, to a considerable extent, been invested in this class of securities, because they afforded a prospect for larger returns than any other investments.

The success of many of the roads now built, and the extension of others, which are necessary to meet the rapid development of the interior, will

depend upon the establishment of a correct basis for the security of the stock and stockholders.

The recommendations which are herein made will, it is believed, meet the present exigencies of the case, so far as the stockholders are concerned, until the experience of the State supervision suggests such further guards and checks as may be then found necessary.

The question of the security of railroad bonds having been raised in consequence of the frauds which have been committed, and in some cases by the excessive issue of bonds in proportion to the stock, it has become necessary to give further assurances to foreign capitalists of the security of their investments before they can be persuaded to make further advance.

This must be done by legislation, and the question should be promptly and frankly met by the railroad interest in this country, by asking for such legislation as will most effectually accomplish this object, without inflicting burthens too onerous on the stockholders.

The establishment by law of a sinking fund for the re-payment of the funded debt, placed beyond the control of the corporation, will at once give such security to the bonds of our railroads, as to render them still more favorite sources of foreign investment.

It should also be understood that no bond should be issued until at least one-half the probable cost of the work has been actually paid in cash and expended.

Such guarantee would relieve present embarrassment, and secure the prosecution of all of the roads that the immediate necessities of the country require.

I would respectfully suggest that a Railroad Commission should be established by law, consisting of the Comptroller, the State Engineer and Surveyor, and a person to be elected by a vote of the stock and bondholders of the different railroad corporations in this State.

That the accounts of the corporations should be open to the inspection of this Commission, and that they should be required to examine into the financial condition annually, and at any other time, when complaints of fraud, properly authenticated, are laid before them.

That no road should be opened for public travel until a certificate has been obtained from the Commission that it has been examined by them, and has been properly constructed and equipped, and that the necessary regulations have been established to prevent injury to life or property.

That the Commission should have the authority to inquire into the causes of all accidents which have injured life or limb, and that they should submit annual reports to the Legislature of all their proceedings under this authority, and also full and ample reports of the financial condition of the several corporations, and of their business operations receipts and expenses, as now provided by law, with such additional information as they deem necessary to lay before the Legislature or the stockholders.

JOHN T. CLARK.  
State Engineer and Surveyor.

#### New York and Erie Railroad.

The earnings of the Erie Road for December compare favorably with the same month of the previous year.

They are.....\$454,431 55  
December, 1853.....381,203 40

Increase.....\$73,228 15  
The earnings of November, 1854, were \$492,000.

The receipts of the present month promise now to be larger than for any previous month since the road was completed, but a larger proportion than usual will belong to connecting roads, so that the earnings will be about the same, probably, as those of December. Compared with the Central Road, the earnings of December are:

Erie.....\$454,431  
Central.....451,828

## Canals of New York.

From the report of the Auditor recently submitted to the Legislature, we extract the following particulars in reference to their business for the past year.

Balance of Canal Funds on hand,  
1st October, 1853.....\$1,287,544 69  
Receipts to do. for 1854.....6,305,057 68

\$7,592,602 37

The payments during the year have  
been.....4,228,593 83

Balance on hand.....\$3,364,008 54  
To which add Amount due from  
Canal Funds.....197,062 71

\$8,561,071 25

Canal Revenues for the year.....\$2,988,665 21

Payments—  
To Superintendents  
& Commissioners.....\$1,131,739 80  
For Collection of  
Tolls.....75,542 93  
For miscellaneous  
purposes.....30,583 47

1,237,866 20

Surplus Revenue.....\$1,750,799 01

Amount appropriat-  
ed to Canal Debt  
Sinking Fund.....\$1,300,000 00  
Do do. to General  
Fund Debt.....350,000 00

1,650,000 00

Balance.....\$100,799 01

Amount set apart for the redemp-  
tion of \$2,500,000 loan—

Payment of Interest.....\$18,691 23  
Do. of Principal..76,170 49

94,861 72

Paid into State Treasury to defray  
Expenses of Government.....200,000 00

Deficiency.....\$194,062 71

The decrease in the earnings for the year is ac-  
counted for by the failure of the crops, the check  
put to the business of the country, and by the un-  
finished character of the works. It will be neces-  
sary, the Auditor says, to stop the annual appro-  
priation of \$200,000 to the State, till the revenues  
reach their anticipated amount.

The expenditure for repairs, he shows, has in-  
creased very considerably and regularly within  
the past few years; though he expresses himself  
as unable to define the cause of its being so.

Various suggestions are made as to the improve-  
ment of the revenues. In the first place, the  
present rates of toll charged are said to be in gen-  
eral *too low*; the reduction made on these in 1852  
is considered to have been unwise, the amount  
received from forwarders having fallen short every  
year since that date. The Auditor also thinks  
that taking off the tolls on Freight carried over  
railroads has worked injuriously, and that the old  
rates should be re-imposed. Tables of the Freight  
carried over the State roads are given, showing  
that 1,829,726 tons of Freight have been trans-  
ported by these which would otherwise have  
probably contributed to increase the receipts of  
the Canals.

As to this suggestion, it should be borne in  
mind that it is easier to throw off than impose a  
tax; and granting the legal right of the State to

do this, as the Auditor argues, the *propriety* of so  
doing is quite another matter. The business of  
transporting Freight is not confined to the canals  
and railroads of this State. Pennsylvania and  
all the Atlantic States are either now vigorously  
competing for the Western trade, or preparing very  
quickly to do so. At such a time, it can hardly  
be the wisest policy *to increase rates in proportion*  
*to the number of competitors*. The State of New  
York does not lie so direct in the way that trade  
*must* pass through her limits. The cities of New  
York and Boston are not by any means the near-  
est points on the seaboard to the valleys of the  
West. Besides, during the year 1854, the ordinary  
expenditure has not only been met and the inter-  
est been paid on the canal debts, but a very  
considerable sum, about \$300,000, set apart to  
the Sinking Fund for the final liquidation of the  
Canal and General Fund debts. If additional re-  
venue be required, which is certainly desirable,  
it is surely inexpedient to go *backwards*, and thus  
drive the traffic into other channels; even sup-  
posing that the railroad interests of the State were  
in such a situation as to allow the restoration of  
the tolls.

## ENLARGEMENT OF THE CANALS.

At the last session of the Legislature, out of  
the loans authorized to be made under such  
amendment of the Constitution, there was appro-  
priated for the enlargement and completion of the  
canals,

For the fiscal year ending Sept.  
30th, 1854.....\$2,250,000 00  
For the fiscal year ending Sept.  
30th, 1855.....2,250,000 00

Total.....\$4,500,000 00

There was expended during the last fiscal year,  
in addition to the old appropriations upon the  
several canals, out of such new appropriations:

For the enlargement of  
the Erie.....\$404,094 92  
For the enlargement of  
the Oswego.....46,830 37  
For the enlargement of  
the Cayuga & Seneca.....45,146 84  
For the enlargement of  
the locks of Cham-  
plain.....  
For the completion of  
the Black River.....  
For the completion of  
the Genesee Valley...25,467 44

\$521,538 87

There has been expended during the  
present fiscal year upon such  
canals:

For the enlargement of  
the Erie.....\$258,713 87  
For the enlargement of  
the Oswego.....81,547 35  
For the enlargement of  
the Cayuga & Seneca.....16,135 17  
For the enlargement of  
the locks of Cham-  
plain.....  
For the completion of  
the Black River.....  
For the completion of  
the Genesee Valley...15,006 06

401,402 48

Unexpended amount of appropria-  
tion.....3,577,058 65

Total.....\$4,500,000 00

Of such unexpended amount there belongs to  
the appropriations made to the several canals, as  
follows, to wit:

Erie.....	\$2,977,001 91
Oswego.....	218,874 28
Cayuga and Seneca.....	139,270 99
Locks of the Champlain.....	49,890 00
Black River.....	67,783 00
Genesee Valley.....	94,238 47

Total unexpended Balance.....\$3,577,058 65

The following is a statement of the contracts  
entered into for the above object.

ESTIMATED COST.	
At Contract Prices.	At Engineers' Estimates.
Erie.....\$3,559,953 44	\$4,631,784 95
Oswego.....440,197 25	508,608 25
Cayuga & Seneca.....235,311 45	290,305 07
Champlain.....67,294 10	80,452 19
Black River.....131,910 60	144,080 00
Genesee Valley.....104,075 00	123,350 00

Total.....\$4,538,741 84 \$5,778,530 46

Showing that the work thus far has been con-  
tracted for at \$1,239,788 62 less than engineers'  
estimates, being an average of over 21.4 per cent.

Reference is made to the Canal loan of last  
year. On that offered in June amounting to \$1,-  
000,000 a premium of \$175,706 25 was realized.  
On the loan of 31st August for the remaining \$1,-  
250,000 the premium received was \$167,248 52.

THE CANAL DEBT AND THE SINKING FUND.  
The total amount of the canal  
stock debt as it existed on the  
1st day of Oct., 1853, amounted  
to.....\$17,001,269 16

There was borrowed during the  
fiscal year ending on the 30th  
September, 1854, for the en-  
largement and completion of  
the canals, under article 7 of  
the Constitution, as amended...2,250,000 00

Total.....\$19,251,269 16  
Debt due Jan'y 1st, 1854.....\$20,000  
Debt due July 1st, 1854.....500,000

520,000 00

Balance of debt not yet due.....\$18,731,269 16  
Of such debt there will become due July 1st,  
1855, the loan made in 1848 to supply deficiencies,  
amounting to \$1,314,819 34; and on the first day  
of January, 1856, there will become due of the 5  
per cent. stock debt, issued for the Erie Canal en-  
largement, the sum of \$4,000,000.

In the Sinking Fund, for the re-  
demption of the canal debt the  
balance on hand, September, 30th,  
1853, was.....\$251,507 92

Received during the fiscal year com-  
mencing October 1st, 1853, from  
the revenues of the State canals.....1,300,000 00

From the proceeds of  
taxes, under chap. 651,  
L. of 1853, in repay-  
ment of loan to the  
Canal Fund.....\$621,467 47  
Interest on such loan...35,678 39

657,145 86  
For interest on deposits.....10,000 00

Total.....\$2,218,653 78

During the fiscal year ending Sept. 30th, 1854,  
payments have been made thereon as follows:

For redemption of canal stocks.....\$479,025 00
Expense of Transfer Office.....2,229 66
Interest on debt.....792,911 00
Debts accruing prior to Jan. 1, 1846, ch.—L. of 1850.....10,938 86
Balance on hand.....933,551 26

Total.....\$2,218,653 78

The Sinking Fund will be equal to all charges  
upon it prior to Jan'y 1, 1856; there will then be

a deficiency of about \$8,500,000 to meet the debt then due. Such amount can then undoubtedly be procured on the credit of the Sinking Fund, without resorting to equitable taxes.

The loan of \$1,500,000, authorized to be made to refund to the holders of canal revenue certificates, the amount received into the treasury thereon, not having as yet been advertised or taken, must be made before the 1st of July next. The further loan of \$2,250,000, appropriated for the present fiscal year, will be required to be issued on or before the 1st of October next.

#### SINKING FUND.

The Constitution requires that there be annually set apart out of the Canal revenues \$1,300,000 until 1855; and afterwards \$1,700,000, as a Sinking Fund to pay the interest and reduce the principal of the original canal debts. For any new debts which may be created there is to be appropriated out of the canal revenues, every year, a sum sufficient to pay the interest as it falls due, and extinguish the principal in 18 years. As the last Legislature authorized loans to the extent of \$4,000,000 they ordered to be set apart, for the payment of interest, \$112,500, and for the Sinking Fund \$155,820 87 = \$268,320 87 for the present year. These sums are stated to be more than sufficient for the purpose named; the annual appropriation of \$126,950 80 at 5 per cent. as a Sinking Fund sufficing to accomplish the object in the specified time.

A sum of \$203,121 31 for the present fiscal year must, under the requirements of the Constitution, be appropriated to be set apart to the Sinking Fund for the extinguishment of the principal of the loans amounting in all to \$6,000,000, thus made and authorized to be made during the present fiscal year, under the provisions of such section, it having been omitted by the last Legislature.

Under the provisions of such third section, a further loan of \$2,250,000 will be required to be authorized and made during the next fiscal year, commencing on the first day of October, 1855, and an appropriation will therefore be required for such last mentioned fiscal year, of \$460,000, or so much thereof as may be necessary for the payment of the interest on all the loans then made under such section, or authorized to be made during that fiscal year; and also the sum of \$279,291 80, to be appropriated and set apart out of the revenues of the Canals for that fiscal year, to the Sinking Fund for the extinguishment of such loans.

These loans made and authorized to be made will then amount to the sum of \$8,250,000.

#### SUMMARY OF APPROPRIATIONS.

The appropriations as made and recommended to be made out of the revenues of the canals for the present fiscal year are as follows:

Expenses of collection, superintendence, and repairs.....	\$1,085,000 00
For Canal Debt Sinking Fund.....	1,300,000 00
For General Fund Debt Sinking Fund.....	350,000 00
For interest on loans.....	275,000 00
For Sinking Fund to extinguish principal.....	203,121 31
To General Fund for support of Government.....	200,000 00
<b>Total.....</b>	<b>\$8,418,121 31</b>

The appropriations required, and as above recommended, for the fiscal year commencing Oct. 1st, 1855, are as follows:	
Expenses of collection, superintendence, and repairs.....	\$900,000 00
For Canal Debt Sinking Fund.....	1,700,000 00
For General Fund Debt Sinking Fund.....	350,000 00
For interest on loans.....	460,000 00
For Sinking Fund to extinguish principal, &c. ....	279,291 80
To the General Fund for support of Government.....	200,000 00
<b>Total.....</b>	<b>\$8,889,291 80</b>

The revenues of the canals for the last fiscal year amounted only to the sum of \$2,988,665 21.

#### Illinois Canals.

As claims are about being made to the Legislature of Illinois to settle the old debts incurred by that State on account of her public works, it may not be uninteresting to our readers to give a sketch of the history of those debts and their present condition. The following facts are taken from the Editorial Correspondence of *The Chicago Press*.

The Illinois and Michigan Canal designed to connect Lake Michigan to the Illinois River, was at first projected to be constructed as a ship canal. The State at the time of its commencement, was in a prosperous condition with flattering prospects ahead. Capitalists and others were invited to settle within her limits and invest their means in the public improvements going on.

This proceeded till 1840, when it was found that there were owing to the contractors about \$400,000. No resources on the part of the State were available to meet this, and the consequence was that the contractors were reduced to the necessity of either throwing up the works altogether or of compromising the matter. In Feb'y 1839, an act had been passed by the Legislature, authorizing an issue of State Bonds to the amount of \$4,000,000 for canal purposes. Of these there were sold—

1,000 Bonds to U. S. Bank at.....	\$976,396 67
100 " mostly to claimants.....	100,000 00
152 " to Messrs. Wright & Co.,	

London .....	148,785 00
1,000 " to claimants, at.....	1,075,000 00

The last amount (the Thornton Loan) was taken by the contractors at *par* (part being in payment of the debts above-mentioned) though State Stocks were then selling at a large discount. The claimants sent Gen. Thornton as their agent to London, to negotiate these Bonds, which were sold at, including expenses, a depreciation of 18 1/4 per cent., causing a loss to the contractors of over \$180,000. For this no claim was made, as they had agreed to receive them at *par* value. But as the exchange at the time was about 7 1/2 per cent. in favor of London, the State retained or charged the contractors with this, amounting on the whole issue to \$75,000. The State thus claims to receive from \$1,000,000 depreciated Bonds, and known to be such at the time of issue, the sum of \$1,075,000. The claimants insist that they are justly entitled to this exchange, and a statement made by Gov. Carlin at the time of issue, appears to justify their view of it. His language as quoted from the JOURNAL of 1840 was—

"I do believe it was a *par* sale, according to the meaning and intention of the Legislature at the

time it was enacted, and that such must have been the intention of the Legislature; because they well knew, when they ordered the sale of \$4,000,000, that Bonds could not be sold at *par*, unless 93 cents with the exchange was *par*."

There are also other claims against the State for the depreciation of interest, scrip, and Canal indebtedness, amounting to over \$1,000,000. The claimants urge that they were to be paid *cash* for their work, that they could get no money from the State, and were compelled in consequence to accept what the State chose to give them to avoid bankruptcy; that this Canal Scrip and indebtedness sunk from *par*, at which it had been taken, to 80 cents. in 1840, and 15 cents in 1842; that Canal lands were sold for which the State received over \$580,000, thereby receiving a clear profit of over \$400,000, as these lands could be paid in certificates of canal indebtedness; that the loss sustained on abandoning their contracts was estimated by the Chief Engineer, at the time, at over \$177,000; but waiving this last, they claim the difference between the prices at which the State paper was sold, and *cash*, as still legally and properly due them, the paper having at the first been forced upon them without their consent.

These claims are now before the Legislature for settlement. There has already been sufficient suffering inflicted by the precipitancy, to say the least, of Illinois and other Western States in undertaking to construct public works, before they were called for. She is now in a position to do something like justice to her creditors. To shrink from giving them their due by such miserable subterfuges as above, is to add the depth of meanness to dishonor. We hold that neither States nor individuals can be freed from paying their creditors *in full*—at some period—by any Bankrupt law. It may possibly be necessary to postpone payments for a time; but sound morality and sound policy alike demand that "they shall in no case escape till they have paid the uttermost farthing."

#### Milwaukee and Horicon Railroad

From the first report of this company we learn that the charter for the construction of this road was granted 20th April 1852, and authorized the corporation thus constituted to build a railroad from Milwaukee via Iron Bridge and Horicon to Fort Winnebago, or such point on the Fox river as should be selected. The capital stock was fixed at \$800,000, in shares of one hundred dollars each, and counties and towns were authorized to subscribe to it. Operations were required to be commenced in five years, and the road to be completed within fifteen years. On the 22nd October, 1853, the books for subscription were opened in Milwaukee, and the first Board of Directors chosen on the 26th November following. A survey of the line to Stevens Point, on Wisconsin river, was ordered, and agents were appointed to solicit subscriptions in the counties and towns along the line. As it was found that the route, for the first 50 miles, lay on the line of the Milwaukee and La Crosse Railroad, an arrangement was entered into with that company by which the construction of this part of the track 50 miles in length, at a heavy cost and yielding small returns, was rendered unnecessary. The arrangement with

the Milwaukee and La Crosse Company is considered favorable, and is understood to continue for 20 years. This company are pushing their road rapidly forward, and are understood to have that part as far as Horicon ready for the iron. On the 25th Jan'y 1854, the stockholders of the Horicon line voted to fix the termination of the road at Berlin, on the Fox river. A contract was entered into for constructing the whole road, except purchasing the iron, at a cost of \$5,400 per mile, payable one-half in cash, one-fourth in stock, and one-fourth in the bonds of the company at par. By the estimate of the Chief Engineer, the cost of the road from Horicon to Berlin, a distance of 42 miles, will be \$794,800, or a little less than \$19,000 per mile. The estimate is considered amply sufficient to cover all expenses of construction, buildings, rolling stock, &c.

The present resources of the company are as follows—

Stock subscribed and approved	\$305,900
Mortgage stock not yet perfected	160,000
Stock to be paid to contractors	55,100
Berlin and Waupun Bonds	150,000

To which may be added 1st mortgage bonds on the road to Berlin, 42 miles. 420,000

County and Town Bonds expected..... 270,000

\$671,000  
\$1,361,000

With regard to the second of these subscriptions, it may be stated that, at the outset, the stockholders authorized subscriptions to be received in mortgages on real estate at half its value, payable in ten years, and bearing 8 per cent. interest. This arrangement involved some outlay and considerable loss of time in settling titles, &c., &c. These subscriptions had not yet been examined; but it was believed that few of them would have to be rejected.

The expenditure of the company, at date of report, had been—

For Construction and Engineering	\$15,517 33
For Personal Property and Right of Way	1,900 83
For Salaries	5,389 52
For Incidental Expenses	7,286 67
For Work and Construction for December, say	1,000 00

Total ..... \$31,094 35

The people west of Fox river having desired an extension of the road as far as Stevens Point on the Wisconsin, the Directors appointed surveys to be made, and subscriptions solicited along the proposed line of extension; offering, as soon as these would amount to \$300,000, to commence operations. Owing to certain difficulties, the work has not yet commenced, but it was anticipated on the arrival of their Agent on the ground, that all the obstacles would be removed, and the work proceeded with. The length of this division is 50 miles.

The following table shows the gradation of that section of the road from Horicon to Berlin.

Level Line	13.03 miles.
15 feet per mile and under	10.69 "
Between 15 and 30 feet per mile	10.50 "
" 30 and 45 "	5.56 "
Maximum 50 "	2.22 "

42.00 miles.

The curvature of the road is remarkably easy, there being only five curves on the line, all of but

one degree of deflection per 100 feet, equivalent to a radius of 5,730 feet.

Length of Straight Line	38.83 miles.
Length of Curved	3.17 "

42.00 miles.

The distances from Milwaukee to the principal places along the line are as follows—

From Milwaukee to Horicon	51 miles.
" Waupun	55 3/4 "
" Ripon	81 "
" Berlin	93 "
" Stevens Point	143 "
" Mississippi river	300 "

About 7 miles of that part under contract are ready for the ballast, and the work along the entire line is progressing as rapidly as circumstances will permit. The rails are expected to be delivered in spring: and as soon as the Milwaukee and La Crosse road is open to Horicon, will be laid with all dispatch.

The road traverses a rich agricultural section of country, the products of which alone, it is expected, will furnish a fair business to the road. We must express our opinion, however, that the calculation of 16 and 24 per cent. of yearly dividends shows a "rather full" development of the organ of *Hope*. That the work will prove a good and safe investment, from the character of the country in common with the rich prairies of the West, we doubt not; but it is pretty evident to our minds that the days of such enormous profits, even in the West, are *gone by*.

The road is favorably located as to its connections with other lines. It will, when completed its entire length, traverse the State from South-East to North-West. The main trunk passes from Stevens Point nearly centrally through the State, to the mouth of the St. Croix on the Mississippi. At Berlin, it connects with the Berlin and Lake Superior road passing North. At Ripon, the Winnebago road will form a communication with Green Bay. The Valley road extends from Waupun to Fond du Lac. At Milwaukee, the railroad communications will be open with Illinois, Michigan and the East by the Lake Shore, and the Grand Huron roads, besides the great advantage of Lake navigation.

#### Earnings of the Grand Trunk Railway.

The earnings of the railway from Portland to Montreal for the year 1854, reached the respectable sum of \$833,040, or at the rate of \$16,020 per week, throughout the year. The cost of the road, and equipment, at the commencement of the year 1854, was not far from \$10,000,000, or about the same as that of the Western Railroad of Massachusetts. The length of the line to Montreal is 292 miles;—that of the Western Railroad of Massachusetts 156 miles. The Western Railroad was opened through to Albany Dec. 21, 1841. The first year, after it was opened, its gross receipts were \$512,678, or \$310,554 less than on the Montreal Line. We give below the receipts of the Western Railroad, since its completion to 1853:

1842	\$512,688	1848	\$1,332,068
1842	573,882	1849	1,343,810
1844	753,752	1850	1,369,513
1845	813,480	1851	1,353,895
1846	878,518	1852	1,339,873
1847	1,325,336	1853	1,555,224

The increase of receipts on the Western Railroad was comparatively slow for the first few years; but since 1847, its earnings have been sufficiently large to ensure a regular dividend.—From the preparations for business upon the route of the Portland and Montreal line we ven-

ture to predict an increase equal to *one-third* the present year, over the past, which, at the low cost of the line,—will very nearly pay a fair dividend. In one respect the line to Montreal, has the advantage over any other railway within our knowledge;—it will hold its business against any possible chances of competition, from the inherent advantages of its position.—*State of Maine.*

#### Finances of Savannah, Ga.

According to a statement furnished us by the City Treasurer, the indebtedness of Savannah is as follows—

Issue of Bonds.	Dates of Maturity.	For what purpose issued.	Amounts.
1st Feb'y, 1839.	1st Feb'y, 1857.	Subscription to Central Railroad Co.	\$221,000
1st Nov., 1849.	1st Nov., 1869.	Do. to South Western R. R. Co.	150,000 00
1st Feb'y, 1850.	1st Feb'y, 1870.	Purchase of Springfield Plantation.	27,840 00
1st May, 1850.	14th May, 1876.	Subscription to Muscogee Railroad Co.	100,000 00
1st Jan'y, 1851.	1st Jan'y, 1876.	Do. to Ogeechee Plk. R. Co.	5,000 00
17th June, 1852.	17th June, 1862.	Savannah Water Works.	22,000 00
7th July, 1852.	7th July, 1872.	Do. Improvement of Savannah River.	185,000 00
1st Feb'y, 1853.	1st Feb'y, 1878.	Do. Savannah Gas Light Co.	21,000 00
1st Nov., 1853.	1st Nov., 1883.	Savannah and Albany R. R. Co.	5,000 00
1st March, 1853.	1st March, 1883.	Do. do.	85,500 00
1st Dec'ber, 1853.	1st Dec'ber, 1888.	City Scrip outstanding and probably destroyed.	1,327 00
Corporation Notes do.	Total		1,968 50

Interest on the above Bonds is seven per cent., and payable semi-annually. All the domain of the city is liable for the payment of the Bonds.

Besides the above, the city has since subscribed for stock in the Savannah and Albany Railroad to the amount of \$1,000,000, on which 10 per cent. has been paid. There will also be shortly an issue of Bonds to the amount of \$100,000 for subscription to the Opelika Railroad Company, dated 1st of May, 1854, and payable at the City Bank of New York, 1st of May, 1874, with interest at the same rates as above.

The resources of the city applicable to the payment of the principal and interest of the above debts, are—

Stocks, at par value.	\$899,500
City Domain, consisting of Lands, Lots, &c., valued at	737,627

\$1,637,127

In addition to the water-works, public buildings, wharfs, &c.

The taxable value of the city on property of all kinds, for 1854, was \$8,135,770.

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## American Railroad Journal.

Saturday, February 3, 1855.

### Parker Vein Coal Company.

*Great and wonderful discovery!* We are permitted to announce, that in making some excavations for the purpose of continuing a *shaft* recently opened by this company, the workmen struck upon a *petrefaction* which, from its singularity, immediately arrested attention. Upon examining still further the new wonder, it resolved itself into an enormous *tusk* of some antediluvian monster. Investigations have not proceeded sufficiently to ascertain its distinct type; but enough is known to refer it, without much difficulty, to the genus, *Humbugus Popularis*, of Cuvier. The tusk measures 79 feet 9 inches in length and 17, feet 8½ inches in its largest diameter, the lower part of it still remaining in the *Jaw*. The fossil is nearly perfect, baring a few scratches supposed to have been inflicted by antediluvian *bears*.—What is very remarkable, and for which no explanation is yet offered, is a large and distinct *black band* about 10 feet wide inscribed around the centre of the tusk. By some it is supposed that when this mystery is resolved, we shall get at the secret of the *black art*; while others expect to extract from it some new agency which shall still further accelerate the progress of this wonderful age.

The great discovery was no sooner made than the joyous tidings were immediately telegraphed to New York. The Directors, in formal session gave instant orders to exhume the monster entire, if possible, for the purpose of sending it round the world on *exhibition*. It is expected that civilized man will eagerly give one dollar per head for a sight. From "the rest of mankind" fifty cents each are expected. These receipts, it will be seen, will make a pretty large sum, and, "deducting 50 per cent. for working expenses," will leave a large surplus for *dividends*. This expectation has, we learn, created great excitement in the "circles." Large purchases of the company's stock have been made; and this fancy *nag* will in a short time again be taken out of Coventry, and be placed upon the course, where we are confident it will not only distance all competitors, but even itself!

We have been allowed to state so much in advance of formal announcement by the Directors of the company, which will be made in a few days. We are proud that we are the medium through which this agreeable and reliable infor-

mation is first communicated to an honorable, intelligent and deserving public.

It will, of course, take time to exhume the monster, the majestic magnitude of whose general dimensions must be inferred from the possession of the dentals (79 feet 9 inches long, and 17 feet 8½ inches in the cross section). We must therefore crave the patience of an eager and inquisitive public. We share with them in their impatience. Added to the pecuniary considerations which arise, question of wonderful interest to a philosophic mind like our own, all "knocking" with ten-fold earnestness for an answer. Assuming that the monster was to appear under the limitations of time and space, we can easily conceive why he should have been deposited on the property of the Parker Vein Company which stands pre-eminent in worth and misfortune—the great paradox of the age—no longer a paradox—since worth has triumphed, as in the end it always will.

The upright posture of the monster would indicate that it died in the same position; leaving an inference that it was let out of the ark, (probably on account of some misdemeanor, as for instance, the want of a well regulated appetite,) and held in suspension till the elements closed around him. Such a supposition involves a slight, but we believe not an inconsistent anachronism in received history, which critical analysis will undoubtedly resolve. But we cannot go into the ramifications of the subject, at the present moment. We must end as we commenced, by announcing a stupendous discovery, and leave future developments to the future.

(For the American Railroad Journal.)

### Obituary of Simeon L. Spafford, Esq.

SIMEON L. SPAFFORD, the subject of these remarks, died in the city of Philadelphia, on Sunday morning 28th of January. At the time of his death, he was the able and efficient Superintendent of the Philadelphia, Wilmington and Baltimore Railroad. The prominent position the deceased has occupied in connection with the railroad interests of our country, renders it proper that something more than a passing notice should be given of his sudden departure from among the living.

Mr. Spafford commenced the study of civil engineering in the office of SAMUEL M. FELTON, Esq., then of Charlestown, Mass., now President of the Philadelphia, Wilmington and Baltimore Railroad. His early career was distinguished by close application to study, and a disposition to excel in whatever he undertook. With a strong love for the study he was pursuing, it is no matter of surprise that he soon stood at the head of a very large class of young men associated with him, and having the same profession in view.

After leaving the office of Mr. Felton, he was employed in surveying and constructing several roads, amongst the most prominent of which may be mentioned the Vermont and Massachusetts, the Troy and Boston, the Alabama and Tennessee, and the Cincinnati, Hamilton and Dayton.—After the opening of this last named road, he became its Chief Engineer, a position he occupied with great acceptance to the company, until called to the Superintendence of the Philadelphia, Wilmington and Baltimore road, in June, 1853.

Mr. Spafford was the author of several very useful inventions connected with the speed and

safety of railroad travelling, which have distinguished him as one of the first mechanics of the age. Amongst these may be enumerated a safety signal for draw-bridges, now in use on all the bridges on the road of which he was Superintendent; also a safety switch; a truss for roofs of great simplicity, cheapness and strength; and a wooden bridge which dispenses with iron rods for trusses. At the time of his death, he was employed in making a model of a bridge on this plan, with a view to constructing one across the Susquehanna at Havre de Grace, at which place the company have recently made the necessary surveys preparatory to erecting a bridge for the use of the road; proposing to dispense with the boat which has long been used at that point for the conveyance of passengers across the river.

Mr. Spafford was a mathematician of no ordinary powers of mind. He never encountered a problem that he did not thoroughly solve, and his services, in this capacity, were sometimes called into requisition by those who have shared honors that justly belonged to him.

The several inventions of which he was the author, are evidences of great mechanical ingenuity. Added to this was a quickness of perception, and a readiness to apply, that rendered his services of special value in cases of emergency. This was evinced at the recent destruction of the drawbridge at Gray's ferry across the Schuylkill. It was predicted, and even announced that the bridge would be impassable for weeks, but for the ready efforts of Mr. Spafford, only two days elapsed before the trains were running again with their accustomed regularity. It was in this department of mechanism that he may be said to have excelled. In bridge masonry, and in the construction of bridges he had no superior; and he has left many of these monuments of his mechanical skill, on the roads with which he has been connected.

In all the relations of his life, Mr. Spafford was without a blemish. He was a useful citizen, a faithful officer, an affectionate husband, a kind father, a warm and sympathizing friend, indulgent, even to fault: and it is believed that he had not an enemy in the world.

He was a leading spirit in whatever circle he moved, though entirely without ambition or ostentation. The common consent of his fellows assigned him the position of a leader, as a just reward due to his merits, without any effort on his part to reach that distinction. He was naturally a man of modest and retiring disposition, and of strong domestic attachments.

Mr. Spafford was a native of Springfield, Vermont, and died at the early age of thirty-five years. His remains have been temporarily deposited at the Woodland Cemetery, on the banks of the Schuylkill, preparatory to their final removal to Northfield, Massachusetts, the residence of the friends of his young and deeply afflicted widow.—His disease was the Typhus Fever in its most malignant form, which terminated his useful life after a brief illness of fourteen days.

Many have lived on earth to the full measure of their "three score years and ten," without accomplishing half as much for the good of the race as did our friend, and have even gone down to the grave without leaving a single monument of usefulness behind them. No so with the subject of these brief remarks. His was a life of great ac-

tivity and usefulness; and if "that life is long which answers life's great end," then may it in truth be said of our friend that life's purposes in him were all fulfilled, and that he was ripe for immortality.

F.

**American Engineering Illustrated.**

We have received from Mr. JOHN WILEY, 167 Broadway, the first number of a work bearing the above title. It consists of large lithographic drawings or plates, twenty-four by thirty-six inches accompanied with eight pages of letter press descriptions.

The drawings are very handsomely executed on stone and printed on fine paper. In the number before us they represent a beam engine, constructed by Messrs HOGG & DELAMATER at their works, foot of Thirteenth st., for the New York Steam Sugar Refinery. Both front and side views are presented and also detailed drawings of the various parts, exhibiting the whole in all its proportions and the harmony of its arrangements with a faithfulness rarely equalled and never exceeded.

These drawings and engravings were executed by the editor, G. WEISSENBORN, civil and mechanical engineer, 181 Fulton street. Mr. W. is known to the country as an inventor and artist of much ability, and the fact of his conception of this publication attests his appreciation of the necessities of the age. His object in embarking in the publication of the "American Engineering Illustrated" is to supply that vacuum which has long existed in the artistical library of this country. His experience and observation have convinced him of the propriety and utility of a publication which shall be devoted to the chronicling and illustrating of the improvements of machinery in America. With this idea, he has taken the charge of this work with the determination to preserve it in its true character, and confine it to improvements which are new and real improvements, and moreover which are American.

The work will be issued monthly at the price of one dollar per number. Six numbers will complete a volume, and illustrations commenced will be completed in the same volume, so that each volume may be complete in itself, and entirely independent of the rest.

To the student, the civil and mechanical engineer, the draughtsman and machinist, this work will impart a more lively interest than anything ever before offered to their patronage. The engravings are in the best style, both of art and execution; they are entirely of new and successful American inventions and manufactures; they are of general and detailed character representing, with the most faithful minuteness the machine as a whole and each portion of it in detail.

The letter press descriptions are also full and exact, embracing a general and detailed review of the drawings, accompanied by index figures and letters explanatory of all the parts of the structure.

No country has advanced so rapidly and so eminently in the construction of machinery as the United States; no one has achieved so many and so important inventions which have been carried to successful operation, and in no country on the face of the earth has genius been so stimulated by demand for labor saving machinery, or so fruitful in its productions. We believe it has now

arrived to that position where its inventors and men of art, science, and mechanism are not only fully able, but abundantly willing to support such a work as is now offered to them in "AMERICAN ENGINEERING ILLUSTRATED." We commend it to all our friends, and trust the editor and publisher may receive such encouragement as they deserve.

**Report of the State Engineer.**

We publish herewith the introduction to the report of the State Engineer on the Railroads of the State of New York. It is a document of unusual interest, and ability and merits, careful attention. In our next we shall give some statistical information from the report.

**Finances of Wisconsin.**

The following condition of the finances of Wisconsin, we take from the Message of Gov. Barstow, delivered to the Legislature on the 12th inst:

It appears that the entire amount paid into the Treasury, during the year 1854, on account of the various funds was:

Account of General Fund.....	\$191,299 46
Do. Principal of School Fund.....	85,583 27
Do. do. University do.....	9,945 59
Do. Income of School fund.....	106,235 03
Do. do. University do.....	8,775 07
	<hr/>
	\$401,738 42

Add balance in the Treasury January 1st, on account of all funds..... 57,436 48

Total..... \$459,274 90

During the same period the disbursements were as follows, viz:

Account of General Fund.....	\$222,154 12
Do. Principal of School Fund including loans.....	84,996 06
Do. Principal of University Fund do. do.....	21,898 93
Do. Income of School do.....	97,188 88
Do. do. University do.....	10,640 44
Do. Fox and Wis. Improvement fund.....	129 00
	<hr/>
	\$437,007 43

Showing a balance in the Treasury, on the first day of January, 1855, on account of the various funds of..... 22,267 47

The Secretary of State, in his report, estimates the amount probably necessary to be drawn from the Treasury, on account of the General Fund, during the present year, to meet present and accruing liabilities at..... \$253,059 52

In this estimate various sums are included for the erection of Penitentiary buildings and a Lunatic Asylum, besides the completion of Blind, Deaf and Dumb Institutions—amounting to over \$140,000.

To meet the foregoing liabilities, the resources are stated as follows, viz:

State Tax, as levied and equalized under the act of 1854.....	\$225,000 00
Bank Tax estimated.....	30,000 00
Rail and Plank Road Tax do.....	9,000 00
Miscellaneous Resources do.....	24,829 91
	<hr/>
Total.....	\$288,829 91

Among the matters of interest represented by this report, is a brief review of the public expenditures, since the admission of Wisconsin into the Union—showing the yearly appropriations therefor, from 1848 to 1854, inclusive—amounting in the aggregate, to the sum of \$830,244 30; of which \$94,071 31 was in the years 1848-9; \$71,675 38 in 1850; \$112,420 80 in 1851; \$123,474 06 in 1852; \$163,910 58 in 1853; and \$264,692 07 in 1854.

**Finances of Louisiana.**

The Message of Governor Herbert to the Legislature, delivered on the 14th ult., shows the receipts and expenditures of that State, for the last fiscal year, to have been:

**RECEIPTS.**

From ordinary sources of revenue.....	\$806,726 24
Money received from the General Government for account of the Road and Levee Fund.....	2,234 24
Sales of slaves out of depot.....	1,590 02
" Int. improvement lands.....	40,510 30
" Swamp Lands.....	219,029 50
Mill Tax from the ordinary Mill Tax.....	310,535 39
Poll Tax.....	47,434 00
	<hr/>
Total receipts.....	\$1,428,159 78
Balance on hand 1st January, 1854.	1,164,791 11
	<hr/>
	\$2,592,950 89

**EXPENDITURES.**

Support of Free Public Schools.....	\$312,269 44
Money returned by the State and Parish Superintendents.....	9,713 56
Salaries of Parish Superintendents for balances due.....	322 20
School Directors of De Soto Parish.....	50 00
Interest on sales of 16th section.....	776 25
Collectors—for deductions and commissions, and compensation to Assessors.....	52,922 96
	<hr/>
	\$376,054 62
Internal improvement Fund.....	49,023 24
Levee and Drainage Fund.....	262,346 17
Redemption of State Debt Fund.....	98,000 00
Free School Accumulating Fund.....	200,000 00
General Funds.....	868,988 63
	<hr/>
Total expenditure.....	\$1,849,552 66
Balance in the Treasury on the 1st of Jan. 1855.....	743,398 23
Due as follows to:	
General funds.....	355,242 75
Mill Tax do.....	74,340 47
Poll tax do.....	40,737 41
Internal Improvement do.....	18,617 90
Road and Levees do.....	14,694 89
Free School accumulation do.....	6,312 30
Redemption of State debt do.....	312 30
Levee and Drainage fund—	
1st District.....	59,120 81
2d ".....	51,275 47
3d ".....	53,353 65
4th ".....	69,381 28
	<hr/>
	233,140 21

As per Treasurer's balance..... \$743,398 23

Particular attention is directed to the Swamp Lands, the vast importance of which will appear from the fact that one-eighth of the State is constantly covered with water, and two-fifths of the remainder are subject to overflow. That to accomplish the drainage of these, and thus promote the health and productive capacity of the State, all their labors should be directed to impart vigor and efficiency to it. Good results have been already achieved, 650,000 acres of overflowed lands having been reclaimed at a cost of only \$156,000, besides the benefit done to individual property in the neighborhood of these improvements. On the region West and South of Grand river, sufficient

data have been collected for the successful prosecution of the work there. These lands, it is expected, when properly drained will not only be among the most productive in the State, but the impediments to free navigation of the river will thereby be removed.

Among the causes preventing their completion before this date, are stated the epidemics of 1853 and 1854, the financial crisis of last year, and principally "the distrust excited in the minds of capitalists at home and abroad by the imprudent and simultaneous undertaking of a system of works, requiring a vast outlay of capital, at a time when the credit of the State had scarcely recovered from the depressing effect of repeated protests." The Governor hopes that a steady and persevering prosecution of the improvements will ultimately inspire public confidence in their success.

#### PROGRESS OF RAILROADS.

Notwithstanding the above named obstacles, 52 miles of Railroad, extending from New Orleans to La Fourche, have been completed, and are now open.

"The business of the company from its commencement to this mon<sup>h</sup>, although small, exhibits a gratifying increase. The receipts have been—

From Pasn'grs Freight. Total.		
From 6th to 30th Nov....	\$3,340	\$5,271
Dec....	4,977	11,042
<b>Increase last month....</b>	<b>\$1,437</b>	<b>\$5,771</b>
		<b>\$7,208</b>

Only 28 miles remain to be constructed to connect New Orleans, by this line, with Berwick's Bay. Four miles of this section will be completed by the month of March; the remainder has been cleared and graded, and will soon be put under contract. The Company still hold \$1,500,000 subscribed by the city, and secured by her bonds, on which they have thought inexpedient to attempt to realize in the present condition of the money market.

Eighty-seven miles of the Northern Railroad are now in daily use. The formidable difficulties anticipated in crossing the swamps and trembling prairies which lie between the city and the highlands, have been overcome at a comparatively moderate expense."

In a few months the road will rest on a solid foundation from New Orleans to the Highlands.

The remainder of the Message is occupied with the topics of Education, Hospitals, Militia, and the effects of the European war on the cotton and other productions of the State.

#### Commerce of Chicago.

The Democratic *Press* of that city publishes an annual statement of the receipts and shipments of merchandise of all kinds at that city. From the tables collected for 1854, we extract the following, being the most important particulars.

#### FLOUR.

Chicago possesses peculiar facilities for becoming the largest flour-exporting city in the world. The character of the soil, of the population, the Lake, Canal, and Railroad communications with all parts of the Union, and latterly the opening of the St. Lawrence, giving its inhabitants the chance of a direct trade with Europe, without trans-shipment,—all contribute to this result.

The receipts of flour at this port, exclusive of that produced by the city mills, were,—

In 1853....	48,297 barrels.
1854....	158,575 "

The amount turned out by the city mills shows a slight decline. The receipts by the Galena road have more than doubled during the year. The largest amount, however, came by the Rock Island road. The serious break in the Canal, low water in the Illinois river, and the drought during the summer have greatly retarded the receipts.

Of the quantity of flour exported, about one-half was sent by Lake, and nearly one-half by Railroads, principally the Michigan Southern and Michigan Central, a very small fraction only going by the Canal. The quantity sent by Lake, has gradually declined from 100,871 barrels in 1850, to 58,573 do. in 1854.

#### WHEAT.

The wheat crop of last season is believed to have been an average one, both as regards quality and quantity, the exemption from blight, and the increased quantity sown having made up for the drought of last summer. In 1852, the total receipts of wheat were less than 1,000,000 bushels; in 1854, they amounted to over 3,000,000, of which only about 100,000 arrived by Teams, and this amount is steadily decreasing. The quantity received by Lake is also diminishing; while that by Canal and Railroad is rapidly increasing. The largest quantity received from the last was by the Galena Union road. The receipts for the last three years are thus shown,—

In 1852 from all sources.....	937,496 bushels.
1853 " " .....	1,687,465 "
1854 " " .....	3,038,956 "

The shipments for the year amounted to 2,106,725 bushels, more than three-fourths of which were sent by Lake, and the balance by Railroad. The last ten years show very little difference in the quantity of wheat sent by Lake. The prices on an average are 50 per cent. higher than the previous year, and 125 above those of 1852.

#### CORN.

The increase in the receipts of this great staple are beyond all precedence. In 1852, the total amount received was less than 3,000,000 bushels, of 56 lbs.; in 1854, 7,490,753. Of these probably not over 200,000 were brought by Teams; the greater part being brought by the Illinois and Michigan Canal. Next in order is the Galena, then the Rock Island, and Illinois Central Railroads respectively. The great bulk is shipped here by Lake. The rise in the price of this commodity has been from 20 to 30 per cent. during the last two years. The exportation of corn is expected to be largely increased for years to come.

#### OATS.

The soil in the northern parts of Illinois and Wisconsin is said to be best fitted for the production of this grain. The receipts for the year were 4,104,385 bushels, against 1,875,770 from the year previous. The great bulk had previously been received by Canal, but last year, the Galena road took the lead. The exportations amounted to 3,229,987 bushels, of which nearly 3,000,000 went by Lake. The Oat Crop in 1854 was reckoned short. The average prices last year were about 20 per cent. above those of 1852.

#### RYE.

The supply of this article has been hitherto very limited, but is on the increase. The quantity received last year was 85,691 bushels, four-fifths of which came over the Galena Railroad. More than one-half of the Rye received was consumed by Distilleries. The greater part

of that exported was sent by Lake, amounting to over 39,000 bushels. The market prices show a corresponding advance to those of corn.

#### BARLEY.

The receipts of this grain are also as yet but small, owing to the uncertainty of its growth.—Last year they amounted to 201,764 bushels, being an increase of nearly 75,000 over 1852. The greater part of this also came by the Galena road. About one-fourth of the quantity received was used by brewers, and the remainder exported in nearly equal quantities by Lake and Railroad.—The market rates of this grain have increased nearly 50 per cent. within the last two years.

Chicago is affirmed by the *Press* to be the LARGEST GRAIN PORT IN THE WORLD.. In proof of this statement, the following summary of receipts and exportations for 1854 is presented.

#### RECEIPTS.

	Bushels.
Wheat .....	3,038,955
Corn .....	7,490,753
Oats .....	4,194,385
Rye .....	85,691
Barley .....	201,764
Flour (158,575 bbls.) equal to.....	792,875
<b>Total.....</b>	<b>15,804,423</b>

#### EXPORTS.

	Bushels.
Wheat.....	2,106,725
Corn.....	6,837,899
Oats.....	3,229,787
Rye.....	41,153
Flour, (158,575 bbls.) equal to.....	538,145
Barley .....	148,421
<b>Total.....</b>	<b>12,902,320</b>

Leaving a balance of about three millions bushels for consumption. The following table of exports from the European ports is made from an average for a series of years; St. Louis, for 1853; Chicago and Milwaukee, for the current year; and New York, for the first eleven months of the same year.

	Wheat.	Other Grains.	Total.
Odessa.....	5,600,000	1,440,000	7,040,000
Galatz & Ibelia.....	2,400,000	5,920,000	8,320,000
Dantzic.....	3,080,000	1,328,000	4,408,000
St. Petersburg.....	All kinds.		7,200,000
Archangel.....	All kinds.		9,528,000
Riga.....	All kinds.		4,000,000
St. Louis.....	3,082,000	1,999,468	5,081,468
Milwaukee.....	2,723,574	1,057,587	3,781,161
New York.....	6,812,452	2,617,883	9,430,335
Chicago.....	2,644,860	10,257,450	12,902,310

The receipts of GRASS SEEDS for the year amounted to 3,047,945 lbs. valued at \$121,918. Nearly one-third of the above was consumed in the oil manufacture of the city. The quantity exported was nearly equally divided between the Lake and the Railroads leading to the East.

#### BUTTER.

No country in the world is better adapted to the production of this important article. Hitherto sufficient interest has not been given to it. The supply of cheese still principally comes from the East. The number of gallons of milk brought by Railroads is set down at 41,182. The quantity of butter received was 2,143,569 lbs. besides what came by teams. More than one-half came by the Galena road. The exports amounted to a little over 600,000 lbs. the largest part of which went the railroads leading East. The prices have risen from the average of 14 cents in 1853 to about 20 cents per lb. in the latter part of 1854.

## PORK AND LARD.

The returns showing the receipts of the latter are imperfect, and show only a partial statement of them. The amount was 4,380,979 lbs. of which about 2,600,000 were exported—principally by Lake. At present statistics cannot be given of the number of hogs packed; but it is known that the number in 1853-4 exceeded 1852-3 by over 3,000,000 lbs., amounting to 13,188,815 lbs. The number of hogs known to have been received during the same season, was 73,980, of which over 52,000 were packed in the city. The receipts of dressed hogs for 1854, amounted to 74,379, weighing 17,674,369 lbs. There has been but little variation in prices for the last two years, the average rates ranging from \$3 50 to \$4 50 per 100 lbs. The present season when closed, is expected to show a large increase in quantity over last.

The number of cattle packed this season is given at 23,961 head, weighing 18,402,228 lbs. Besides these a large number have been forwarded alive to New York. A calculation based upon the prices at the close of the year, makes the value of those packed in the city to be \$865,773 for the last year.

## LUMBER.

From the opening of the Illinois Canal, in 1848, to the present time, the receipts of lumber have increased from 60,000,000 to upwards of 228,000,000 feet, besides a corresponding quantity of lath, shingles and other articles. The business is now become one of the established and leading ones of the place. A considerable quantity has been received by railroad. A large share are hard-wood and comes from the timbered parts of Michigan and Indiana. A little over one-half has been exported—principally in exchange with the surrounding country. The receipts have increased about seven-fold within the last eight years.

## WOOL.

The season for wool has been remarkably dull and unsatisfactory throughout, in consequence of the large decline in price. The receipts have been 751,833 lbs., showing a decrease of 278,626 lbs. from 1853. Of the above quantity, 536,791 lbs. have been exported.

## LEAD.

This is expected to be one of the most important businesses of the place, in a few years. The amount received last year was 4,247,128 lbs. being an increase of nearly one million pounds over the previous year. 2,591,000 were exported by Lake, 1,527,000 have been retained or worked up, and the balance sent chiefly Eastward by Railroad.

The present annual consumption of fuel is about 50,000 cords of wood, and 50,000 tons of coal.—Inexhaustible supplies of excellent coal have been found within easy reach of the city. Through these beds several roads are already in operation. The horse market it said to be without a rival; more than 2,000 head having been sold at one establishment during the year.

The number of vessels of all kinds entering the port of Chicago for the past year,

was..... 4,521  
Tonnage of do. for do..... 984,144 tons.

The aggregate tonnage is stated to have, in fact exceeded one million tons. The amount of duties received on imported and bonded goods, for 1854, was..... \$575,802 85

being an increase of over \$375,000 over the preceding year. The following table shows the number of vessels of various kinds owned in the District of Chicago, including the ports of Waukegan, Michigan City, and Chicago.

	Tons.
Steamboats	5
Propellers	6
Barks	5
Brigs	25
Schooners	92
Scows	4
Sloops	1
Total	138

## Philadelphia and Columbia Railroad.

The following statement shows some of the leading articles of freight over this road during the year ending 30th November, 1854, and the quantity. It will be seen that the total amounts to about 36,000 tons eastward and 1,200 westward. This road belongs to the State of Pennsylvania, and is the eastern connection of the canal from Columbia to Philadelphia. These figures are from the late official report.

Flour, barrels.	107,082	Corn Meal lbs.	503,400
Wheat, bush.	30,900	Glue, pieces	124,200
Corn	82,791	Oysters	147,500
Oats	40,679	Lard	89,100
Driedfruits, lbs	45,400	Pig Iron, tons.	1,320
Pork	43,900	Castings	258
Iron, tons	1,321	Scrap Iron	84
Blooms	1,637	Nails	26
Rye, bush	1,072	Straw, lbs.	52,700
Seed	1,218	Lumber	593,600
Potatoes	1,165	L. Tobacco	318,600
Grain lbs	2,534,500	Poultry	15,700
Butter	53,400	Apples	33,100
Eggs	913,000	Lead Ore	34,700
Muslin	2,698,800	Hardware	49,200
Cotton Waste	337,600	Bones	91,600
Whisky, hhd	2,599	Ware	9,200
Leather lbs	698,800	M'd Tobacco	5,500
Live stock	10,747,400	Bark	181,100
Straw paper	1,120,100	Marble	28,200
Paper	87,800	Bricks	149,100
Machinery	271,400	Millstones	22,600
Furniture	197,200	Coal, tons	1,267
Rags	391,900	Bagging, lbs.	314,300
Empty bbls.	291,200	Sand	41,400
Express	1,512,100	Steel	7,400
Millfeed	30,100	Sundries	233,200

Aggregate Tonnage and Cars Cleared.		
Tonnage Eastward	71,976,300	lbs.
" Westward	2,420,409	
Cars cleared Eastward	18,043	
" " Westward	13,581	

## Camden and Amboy Railroad.

The annual report of the State Directors of the Camden and Amboy Railroad has been made.—The increase in the value of their property during the year 1854, was about \$150,000. The gross receipts of the company \$1,682,436 23, and the expenditures \$1,132,029 10, showing an excess of \$552,456 13. The net earnings of the Delaware and Raritan Canal for the year, were \$303,186 41. The whole revenue accruing to the State for the year 1854 from all sources, was \$134,071 12, of which \$61,175 43 accrued from transit duty on the railroads; the sum of \$44,035 69 for transit duty on the canal. During the year the Belvidere Railroad has been opened to Easton, and the Flemington Railroad, from Flemington to Lambertville.—The number of passengers carried on the road, amount of passage money and transit duties, have been as follows: In the Camden and Amboy Railroad trains from Philadelphia to New York 46,147 first-class, passage \$119,251, transit \$4,614; 38 excursion passengers, passage \$152, transit \$7 60. Number of passengers from New York to Philadelphia 37,300 first-class, passage \$97,634 25, transit \$3,780; 53,748 emigrants, passage \$83,789 68, transit \$6,874 87; 39 excursion

passengers, passage \$3,874, transit \$107 90. The above does not include way passengers.

The following table shows the quantity of way freight carried on the C. & A. R. R. in the years named:

	Tons.	Tons.	Tons.
1835	1,451	1847	16,892
1840	8,356	1848	15,095
1845	7,489	1849	11,815
1846	18,198	1850	20,503
			1854
			43,134

The following shows the trade of the Delaware and Raritan Canal:

	Tons.	Ibs.
Coal from Schuylkill in boats	558,594	287
Coal from Richmond in boats	392,527	436
Coal from Richmond in sloops and schooners	60,835	703
Coal from Bristol in sloops and schooners	55,784	1,125
Coal from Bristol in boats	42,848	..
Coal from Feeder in boats	130,988	1,232
Coal from Cumberland in boats	41,180	912

Total..... 1,283,148 211

Quantity of Timber carried through, 1,386,860 cubic feet; do. Lumber, 12,270,506 do.; do. Grain and Feed, 1,069,700 bush.; do. Flour, 206,097 bbls. Amount of Iron, 36,699 tuns 1,946 lb. Through merchandise, not included above, 176,882 tuns 1,798, lb.

Gross receipts of canal for the six months ending June 30, 1854, \$190,824 06; expenditures, \$71,019 67; receipts for six months ending Dec. 31, 1854, \$284,116 23; expenditures, \$100,734 34.—Net earnings for the year, \$303,186 41.

## Finances of Massachusetts.

From the Governor's Message we learn that the receipts and expenditures of this State for the last fiscal year were:

RECEIPTS.	
From Bank Tax	\$525,868
From Alien Passenger receipts	50,000
From Western Railroad Sinking fund and dividends	119,696
From Cash on hand from 1853	18,410
From other Sources	9,308

Total ordinary revenue..... \$718,282

EXPENDITURES.	
For Legislative and Executive department	\$354,898
For Scientific and Education purposes	20,686
For Charitable and Humane purposes	236,652
For Correctional and Preventive purposes	170,355
For military do	67,489
For interest on debt	100,625

Total ordinary expenditure..... \$960,205

Deficiency..... \$231,923

Of the expenditure the following sums were for extraordinary purposes:

For Convention expenses	\$11,205
For new Lunatic Hospital do	10,000
For Malden Bridge	9,000

\$30,205

The Governor thinks that the Bank tax alone seems likely to produce additional revenue for the ensuing year, perhaps to the extent of \$20,000—the increase proceeding from banks chartered last year. He considers that the wants of the community do not require any additional banking capital, and hopes that no more charters will be granted. He advises the repeal of the usury laws, so far as they apply to negotiable paper having not over eight months to run. As the public lands belonging to Massachusetts in the State of Maine have been all sold, the abolition of the office of Land Agent is recommended. The neces-

sity of Legislation on the subject of over-issue of stock, is pointed out; also the protection of bank bill holders in case of failure. By the census of 1850, the Governor states that the aggregate agricultural property in the State amounted to over one hundred and forty millions of dollars.

#### Railroad Earnings for December.

The following table shows the receipts for December, as far as have been received.

	1854.	1853.
Baltimore and Ohio—Main Stem	\$264,506	\$322,163
Baltimore & Ohio—Washington Branch	29,917	—
Chicago & Mississippi	111,000	52,619
Chicago and Rock Island	82,341	35,330
Cleveland and Pittsburgh	31,000	54,457
Cleveland and Toledo	71,400	381,203
Frie	454,432	65,350
Galena and Chicago	120,000	—
Harlem	93,493	76,597
Hudson River	215,905	123,175
Indiana Central	28,853	—
Macon and Western	31,797	30,719
Michigan Central	135,327	80,094
Michigan Southern and Northern Indiana	152,046	116,376
Milwaukee & Mississippi	29,010	19,148
New York Central	451,829	446,964
Norwich and Worcester	20,944	23,887
Ohio and Pennsylvania	90,021	64,630
Stonington	17,817	17,990

#### Kenosha and Beloit Railroad.

The report of this company shows the receipts for the past year to have been \$102,531 consisting of the following items, viz—

Received on Stock	\$57,360
" from other sources	1,171
" first Mortgage Bonds	24,000
" City Bonds	20,000
	<b>\$102,531</b>

all of which has been expended.

The general resources of the company are—

City Bonds	\$150,000
First Mortgage Bonds	480,000
Amount of Stock taken	150,000
Do. payable to contractors	400,000
Real Estate, valued at	15,000
	<b>\$1,195,000</b>

showing a credit basis of \$1,092,000, while the outstanding debt of the company is less than \$2,900.

The report states that, on the part between Kenosha on Lake Michigan and the Fox river, to which operations have been confined, the right of way has been secured, the principal grading and bridging work has been completed, and both at lower rates than estimated. It is expected that the work of laying the rails will commence about the first of June next, and that the whole can be completed as far as Fox river, a distance of twenty miles, by the beginning of August. The Directors speak confidently of the ultimate success of their road.

#### Railroad Contracts.

Contractors will observe that there are some three or four notices to contractors in this week's JOURNAL. The works to be let are in Virginia, Pennsylvania and Tennessee, on the Norfolk and Petersburg, Philadelphia and Baltimore Central, and Nashville and North-Western Railroads. All particulars will be ascertained by reference to the advertisements.

#### Galena and Chicago Railroad.

In relation to the dividend of 5 per cent. in the Galena and Chicago Road, payable in certificates, a circular just issued by the company, says:

"Until within a few days past, the Directors had contemplated making a cash dividend payable on demand; but the effect of the failure of the agents of the company in New York, at a period of such general distrust, is such that money cannot be procured from sales of construction Securities, (except at rates which the Directors are unwilling to accede to,) to replace the sum drawn from the operating department, for construction purposes. The current operating receipts have been used in constructing the "Air Line" to Fulton, (which is now open and operated to Dixon,) for the purpose of rendering that line more productive; and in the construction of double tracks, the purchase of additional depot grounds, and the erection of additional freight depots in Chicago, which the increased business of the road imperatively demanded.

"The business of the past year has been much better than heretofore, and has exceeded the expectation of the managers. The payment of 17 per cent. in dividends, within the year, will leave an increased surplus of earnings sufficient to fully cover depreciation and contingencies, and satisfy the most cautious.

"The principal injury inflicted on the company by the suspension of its agents, is the temporary effect upon its credit. The actual loss which the company will sustain cannot exceed \$70,000—a sum equal to about 1½ per cent. on the present capital stock, or about 1 per cent. on the entire cost of the roads of the company, when fully completed."

#### Sault St. Marie Canal.

This work, which was rumored to be suspended, will be finished by the 1st of May, and duly delivered to the government of Michigan. The term for delivery does not expire till the 19th of May. The canal cost one million of dollars in round numbers; for which the contractors receive seven hundred and fifty thousand acres of land.

These lands are some of them mineral and some timber lands; and are of an indefinite prospective value. Great credit is due the company for the energy with which they have prosecuted the work during the last few months, and to Mr. J. W. Brooks, under whose supervision this great work has been carried forward to a point which ensures its completion. There was great danger of its suspension until Mr. Brooks by his vigorous management infused into it the energy for which he is so well known. The value of the lands in the vicinity of the Sault, and the water power afforded by the Sault St. Marie Falls will be greatly enhanced by the opening of this improvement.

We understand that the capital of iron workers is being rapidly directed toward this point for investment, the abundance of iron and copper ores, and wood and coal, together with the water power combining to make it a most desirable point for the location of smelting works and mills for the conversion of the ores into metals of a marketable shape.

#### Smith's Topographical Drawing.

It will be seen that JOHN WILEY has published this valuable work by Lient. Smith of the West Point Academy. By reference to the advertisement it may be observed that it is approved by some of the first authorities of the country on such subjects.

#### Furnace for Sale.

We invite attention to the advertisement offering the Rossie Furnace, near Ogdensburg, N. Y., for sale. The situation is convenient for the receipt of all the best ores in the country; wood and charcoal are cheap and abundant; the ores of Lake Superior, Ohio, and Pennsylvania may be transported all the distance by water; and those of this State are near at hand both by water and railway transportation. The facilities for distributing the products of the furnace are unsurpassed. The property is valuable and in good repair.

#### Troy and Greenfield Railroad Co.—Hoosic Tunnel.

This company have authority to construct a road from Greenfield to North Adams, Mass., a distance of 41½ miles. About 4 miles are to be tunneled through the Hoosic mountain by which operation the engineers estimate a saving in grades, curves, &c., equal to some sixty miles distance, in the expense of transportation. We understand that the company have entered into a contract with Mr. E. W. SERRELL of this city for the construction of the whole work for the sum of \$3,770,000 payable as follows—

In State loan of two million which the company guarantee, with premiums to amount to ..... \$2,200,000  
In Bonds of the company ..... 700,000  
and the balance in cash subscriptions ..... 870,000

Mr. SERRELL enters sureties in the sum of \$600,000 to complete the portion of the work exclusive of the tunnel, 37 miles, and deliver it to the company, stocked with six locomotives and other necessary rolling stock, in April 1858, and the tunnel in April 1860, the contractor to have the use of the road himself previous to this date, if completed.

Mr. SERRELL is a Civil and Mechanical Engineer of much ability and experience; and we are informed that he expects by availing himself of a combination of tunneling apparatus, to be able to complete the excavation of the tunnel in four years. The work on the road and tunnel will be recommended with vigor immediately on the opening of the Spring, or as soon as the necessary machinery can be procured.

#### Notice to Contractors.

#### PHILADELPHIA AND BALTIMORE CENTRAL RAILROAD COMPANY.

THE Philadelphia and Baltimore Central Railroad Company having determined to commence the construction of that portion of their road between the West Chester and Philadelphia Direct Railroad, and the Maryland State line, 34 miles in length, the undersigned will receive Proposals, at the Office of the Company, in Kennett Square, Pa., on the 15th day of February, 1855, for Grading, Bridging and Masonry of those Sections of the Road between the Brandywine and the Maryland State line, which at that time may not be contracted for to residents along the line of the road. The work will be divided into sections of one mile in length or less. The line will be ready for examination on the 8th of February, 1855, at which time plans and specifications will be exhibited, and blank Proposals furnished by T. E. SICKELS, Chief Engineer, at the office of the Company. PAYMENTS will be made to the contractors in cash, monthly, during the progress of the work.

FRANKLIN TAYLOR,  
President of the Philadelphia and Baltimore Central Railroad Company.

**Notice to Contractors.**  
NASHVILLE AND NORTH WESTERN RAIL-  
ROAD.

PROPOSALS will be received at the office of the Nashville and North Western Railroad Company, for the graduation and masonry of said Road in sections of twenty or thirty miles.

The Company reserve the right to reject all the Proposals if none are satisfactory.

The length of the Road is one hundred and sixty miles, and Proposals, are invited from contractors of ability for the entire work, including track, stating what amount of Bonds, Stock and Cash will be received in payment.

Any information required can be received by application to

N. MACNEALE, Chief Engineer.  
NASHVILLE, Tennessee, 25th January, 1855. 4t 5

HERRING'S

**Patent Fire Proof Safes.**

THE subscriber continues to manufacture his unrivaled patent fire and burglar proof safes, warranted equal to any, and superior to some, of the many which have been tested, as published and noticed by the press throughout the world for the last fifteen years, and is sole proprietor of Hall's patent powder proof lock, both having received separate medals at the World's Fair, London, 1851, and New York in 1853-4. Also the patentee (by purchase) of Jones' celebrated patent combination and permutation bank lock. \$1,000 in gold was placed in the safe exhibited at the World's Fair London, secured by Hall's and Jones' lock, and offered as a reward to any one who would pick the locks or open the safe within forty-five days, and although operated upon by several skilled in the art of lock picking, no one succeeded in opening the safe, (no change or alteration in the locks or keys having been made during the time,) but the money remained in its safe depository and was returned to the proprietor, and a medal awarded him for the champion safe of the world. Caution—None genuine except those having the subscriber's name on a metal plate.

SILAS C. HERRING,

Green Block, corner of Pine and Water streets, New York.  
N.B.—The above safes and locks can be had (adding freight at manufacturer's prices of his authorized agents, in all the principal cities in the United States and Canada.

**CAR WHEEL WORKS,**

Callowhill & Sixteenth sts.,

PHILADELPHIA, PENN.

**A. WHITNEY & SONS,** PROPRIETORS.

HAVING erected an extensive establishment for the manufacture of RAILROAD WHEELS, and fitting same on Axles, are prepared to furnish all the different sizes and kinds required. Have patterns for wheels 18, 24, 26, 28, 30, 31, 33, 34, 36, 42, 44, 46, 48, and 54 inches diameter, suitable for HAND TRUCK, MINING, GRAVEL, REPAIRING, COAL, FREIGHT, ACCOMMODATION and EXPRESS PASSENGER CARS, and for LOCOMOTIVE DRIVERS, TRUCKS and TENDERS; spoke or plate form, as may be preferred; and will make patterns, &c., for any other sizes that may be required, when an order is for an amount that will warrant the expense. Having adopted a system of boring wheels and fitting axles, to standard uniform gauges, are enabled to fit worn-out wheels of their fitting, without returning the axles. Have made arrangements for procuring the best ENGLISH and AMERICAN ROLLED, and AMERICAN HAMMERED AXLES, so as to be enabled to furnish them on as favorable terms as they can be purchased from importers or manufacturers.

A circular will be sent to persons requesting same, stating prices and terms of payment.

Officers of Railroad Companies, Car Builders, &c., are invited to visit the Works, and examine the mode of manufacture, and manner of fitting wheels on axles.

5t 5

**Notice to Contractors.**

PROPOSALS for Masonry will be received until the 15th of February, 1855, for the construction of about 7,000 cubic yards of Bridge and Culvert Masonry, said masonry is in the vicinity of Norfolk and also of Petersburg on the Norfolk and Petersburg Railroad. For further information inquire of Wm. MAHONE, Esq., Chief Engineer, Norfolk, Va., or to the undersigned at Petersburg, Va.

DAVID BISSET.

January 24th, 1855.

5t 5

**Notice to Contractors.**

OFFICE OF METROPOLITAN RAILROAD CO.,  
Georgetown, D. C., Dec., 26, 1854.

SEALED PROPOSALS for the grading, masonry, and bridging of forty-three and a half (43 1/2) miles of this road will be received at the office of the company until three o'clock p. m. on the 15th day of February next.

The maps, profiles, plans, and specifications will

be ready for inspection on and after the 5th day of February.

The Metropolitan Railroad is designed to extend from the cities of Washington and Georgetown to the Balt. & Ohio R. R. by an easy and direct route, connecting with the latter road east of the "Point of Rocks," on the Potomac river, and making a saving of distance on the first ninety miles of the present travelled route from the Capital to the Western and Northwestern States of forty-five miles.

Proceeding from the point of intersection with the Baltimore and Ohio Railroad the route extends to the city of Frederick, and passing through the richest agricultural districts of Maryland, terminates in the city of Hagerstown, where it connects with the lines of railroad now in operation extending to Harrisburg, the Pennsylvania Railroad, &c.

The portion of the road for which proposals are now invited extends, from the westerly line of the District of Columbia (3 1/4 miles from Georgetown) to the city of Frederick.

Proposals will be received for the work in sections of one mile each, or for the entire distance of 43 1/2 miles.

The work generally is of a medium character for this part of the country, with some heavy cutting (in earth and rock) and bridging; and every facility exists for prosecuting it vigorously and with economy at all seasons of the year. The country is elevated and rolling, well watered, and remarkably healthy.

The time conditioned for the completion of the contracts, will be from one to two years.

Any further information desired by persons proposing for the work will be furnished at the office, or may be had by addressing the President of the company by letter prior to the day of letting.

By order of the Board of Directors

FRANCIS DODGE, President.

EDMUND FRENCH, Chief Engineer.

Dec 29 5.

New and Valuable Work for  
ENGINEERS, SURVEYORS, &c.  
JOHN WILEY, 167 Broadway, New York,  
has recently published

A MANUAL OF

**Topographical Drawing,**

By Lieut. R. S. SMITH, U. S. Army, Assistant Professor of Drawing in the U. S. Military Academy, West Point, N. Y.

Illustrated with COLOURED DIAGRAMS and NUMEROUS PLATES.—1 vol. 8vo.—Price \$1.50.

From the Author of "Roads and Railroads."

"I have looked over Lieut. R. S. SMITH's MANUAL OF TOPOGRAPHICAL DRAWING, and find it decidedly the best treatise on that subject which has yet appeared. It presents the principles established by the best authorities on this subject, in combination with numerous valuable hints on detail, which have evidently resulted from skilful individual practice.

Yours respectfully

W. M. GILLESPIE,

Prof. of Civil Engineering in Union College."

"Rensselaer Polytechnic Institute, December 1854.

Dear Sir—Lieut. SMITH's treatise while sufficiently comprehensive to meet all ordinary wants either of the Civil Engin'r or special Topographer, presents the principal methods of delineation according to the Horizontal and Vertical systems, in a manner at once perspicuous and practical; and, for the adaptation to the purposes of a textbook in class instructions, or for suitableness to the needs of self-instruction,—so far as a written guide can take the place of much oral and manual exemplification of the processes incident to any branches of the Graphic Art,—the little Manual appears to leave scarcely anything to be desired. Its use has been ordered in this Institute.

Yours &c.

B. FRANKLIN GREENE,  
Director, &c. R. P. I.  
5t 5

**NEW YORK STATE CANALS.—NOTICE TO CONTRACTORS.**—In pursuance of a resolution of the Contracting Board, notice is hereby given, that sealed proposals will be received by the undersigned for the construction and completion of the work upon the several Canals of this State, described in the following tabular statement at the times and places therein mentioned:

**ENLARGEMENT OF THE ERIE CANAL—EASTERN DIVISION.**

Sealed proposals will be received at the Engineer's Office in the city of Utica, until Monday, the 12th day of February next, at 11 o'clock in the forenoon, for the following described work, to wit:—

Description of work.	Amount of penalty in bond.	Time of completion.
Section 30.....	\$6,700..	April 1st, 1857.
" 31.....	6,000..	" " 1857.
" 32.....	3,600..	Aug. 1st, 1855.
" 33.....	8,200..	April 1st, 1857.
" 34.....	2,000..	" " 1856.
" 35.....	4,400..	" " "
" 40.....	2,700..	" " "
78 and Section No.2 of Rocky Rift Feeder	10,000..	" " "
" 83.....	4,100..	" " "
" 84.....	1,200..	" " "
" 129.....	7,400..	" " "
1 Rocky Rift Feeder	2,000..	" " "
" 3 do.....	3,600..	" " "
Lock No. 24.....	5,500..	July 1st, 1857
" 32.....	6,300..	" " "
" 39.....	6,600..	" " "
" 41.....	6,200..	" " "
Bridge Abutments on sec- tions 31, 32, 33 and 35.	1,700..	" " 1856.
Do. do. on sections 44, 45 and 56.....	1,300..	" " "
Do. do. on sections 69, 70 and 76.....	2,200..	" " "
Do. do. on sections 77, 79 80 and 84.....	2,100..	" " "
Do. do. on sections 101, 102 and 103.....	2,100..	" " "
Do. do. on sections 104, 106 and 113.....	2,000..	" " "
Culverts on sections 20, 33 and 34.....	1,400..	" " "
Do. on sections 85 and 40.	1,300..	" " 1855.
Waste Weir on Section 30	1,000..	" " 1856.
Dam and Bulk Head for Rocky Rift Feeder	2,100..	April 1st, "
Culv't under Castle Creek for Rocky Rift Feeder.	2,100..	" " "
Culverts, Bridges & Tow- ing Path Bridge and Drop for do.....	1,500..	" " "
Iron Bridge Superstruc- ture for Main street Bridge, Fultonville....	450..	1855.

**BLACK RIVER CANAL.**

Sealed proposals will be received at the Engineer's Office at Lyons Falls, until Wednesday, the 14th day of February next at 9 o'clock in the forenoon, for the following described work:—

Clearing and Snagging 42 1/2 miles of Black River from Lyons Falls to Carthage, construct- ing eight Jetty Dams and Piers, and Dredg- ing the first eight miles of Black River, below Lyons Falls.....	\$14,000..	Aug. 1st, 1856.
Valve Gates for Locks Nos. 98 to 108 inclus..	500..	July 1st, 1855.

**ENLARGEMENT OF THE ERIE CANAL—MIDDLE DIVISION.**

Sealed proposals will be received at the Engineer's Office, in the city of Syracuse, until Thursday, the 15th day of February next at 12

o'clock A. M., for the following described work, to wit:—

1 Iron Superstructure for Bridge at Montezuma with penalty in bond of \$300. To be completed the 15th of April, 1855.

**ENLARGEMENT OF THE ERIE CANAL—WESTERN DIVISION.**

Sealed proposals will be received at the Engineer's Office, in the city of Rochester, until Friday, the 20th day of February next, at 9 o'clock A.M., for the following described work, to wit:—

Description of the work.	Penalty	Time of completion.
Section 245.	\$5,300	April 1st, 1857,
" 246.	6,000	" "
" 247.	5,700	" "
" 248.	7,000	" "
" 249.	6,800	" "
" 250.	7,100	" "
" 251.	6,200	" "
" 252.	7,300	" "
" 253.	9,000	" "
" 254.	4,800	" "
" 255.	6,200	" "
" 256.	19,000	" "
" 257.	11,000	" "
" 258.	13,400	" "
" 259.	10,800	" "
" 260.	7,000	" "
" 261.	5,400	" "
" 262.	6,300	" "
" 284.	7,000	April
" 289.	22,500	1857.
" 290.	9,200	1856.
" 296.	7,300	" "
Lock 65 and Reducing Lock 64.	5,600	" 1857.
Lock No. 66.	5,500	" "
Waste Weirs on Sections 245 to 262, inclusive.	1,000	Nov. 1st, 1856.
Waste Weir on Section 289.	500	" 1855.
Bridge Abutments on Sections 245 to 252, inclus.	3,200	April 1st, 1857.
Bridge Abutments on Sections 253 to 262, inclus.	3,400	" "
Bridge Abutments on Section 289.	600	" 1856.
Bridge Abutments on Section 369.	500	" 1855.
Culverts on Sections 245 to 256, inclusive.	9,000	Nov. 1st, 1856.
Culverts on Sections 257 to 262, inclusive.	2,500	" "
Culverts on Sections 284 and 289.	6,500	" 1855.
Medina Aqueduct Section 320.	800	April 1st, 1855.
1 Iron Superstructure for Glasgow street Bridge, Clyde.	500	May 1st, 1855.
1 do. for Sodus st., Clyde.	500	" "
1 do. for Church st., Lyons.	600	June 1st, "
1 do. for Monroe street, Rochester.	500	May 1st, "
1 do. for Shelby st., Medina	520	" "
1 do. for Amherst street, Buffalo.	640	" "
1 do. for Ferry st., Buffalo.	760	" "

The Culvert for the Irondequoit Creek on Section 256 must be completed by April 1st, 1856.

All propositions must be for a sum certain, as to the price to be paid or received, for each and every kind of work; and no proposition not thus defined will be received or acted upon; and no proposition will be considered complete unless a price for every kind of work included in such proposition is distinctly and plainly inserted.

Every proposal shall be accompanied by an affidavit, endorsed thereon, of each person uniting in such proposal, that he is not directly or indirectly interested in any other proposal for the same work or materials, or any part of the same; that he has no agreement or understanding with any other person to become interested in any other proposal or contract for the same work or materials, or any part thereof; and that no other

person than such as shall be named in the proposal is interested in the same, or has any agreement or understanding to become interested in any contract that may be made in pursuance of such proposal.

Every proposal for work or materials embraced in the above statements shall be accompanied with a bond to the people of this State, in the penalty specified opposite each kind of work in said statement, and which bond shall be signed by the party making such proposal and two or more responsible sureties, with such evidence of their responsibility as the contracting board shall require, and which sureties shall justify in sums equal in the aggregate to twice the amount of such penalty.

Each proposal must be accompanied by the certificate of the Supervisor of the town, and the County Clerk, or the County Judge of the county in which said surety shall reside, or any two of them, as to the responsibility said sureties.

The persons to whom the work may be awarded will be required by the contracting board to give the bond for the payment of laborers' wages, as required by chapter 278, of the laws of 1850.

No acceptance of a proposal or award of a contract by the contracting board, and no contract made by the said board, or any interest in the same, shall be assignable to any person or persons, without the written consent of the Canal Commissioners.

Fifteen per cent. of the amount of any work done or materials furnished, at the contract price thereof, shall be reserved by the Canal Commissioner until the whole work, which is the subject of the contract, shall be fully and entirely completed.

In case the contracting board shall be of opinion that the proposals made at any meeting thereof, pursuant to any advertisement, are, in consequence of any combination or otherwise, excessive and disadvantageous to the State, they may decline all the said proposals, and advertise anew for the work and materials embraced therein.

Contractors will be required to receive and use in the work all such materials as have been previously procured and delivered for any of the above work, and allow such prices therefor as may be exhibited at the several offices prior to the letting.

The prices in the contract will be considered as including the expense of furnishing all the materials, and performing all the work, according to the plans, specifications and notices exhibited at the letting.

The persons to whom the work may be awarded, will be required to enter into contract for the performance of the work within ten days after the same shall have been awarded to them, upon the terms prescribed by the contracting board.

The name or names of the persons proposing, must be written out in full, with their places of residence.

The maps, plans, specifications, quantities of materials, propositions, blank contracts and bonds will be ready for examination at the several places specified in this notice, ten days previous to the time specified for the several lettings.

In all proposals where the figures used are of a doubtful construction, such proposal will not be canvassed.

Dated at ALBANY, January 12th, 1855.

HENRY FITZHUGH,  
FREDERICK FOLLET, } Canal Comm'r.  
CORNELIUS GARDINIER, }  
JAMES M. COOK, Comptroller. [3.4t  
JOHN T. CLARK, State Eng. and Surveyor.

**Auburn Steam Forge.**

THE Forge Works of Smith & Richardson are being removed from Utica to the City of Auburn, Cayuga County, N. Y., where the business of manufacturing Car and Locomotive Axles, and other Shafting, will be continued by the undersigned. They will be prepared to make to order, on short notice, all kinds of small forgings. Their work will be all made after the most workmanlike manner and warranted. Parties wishing work done will find us prepared to contract for large jobs on favorable terms.

The Forge and Machinery are new, and the very best kind. SMITH & RICHARDSON & CO.

Auburn, N. Y., June 1, 1855.

ROBERT POOLE. THOS. M. SMITH. GERMAN H. HUNT.

**UNION WORKS,**  
North street, opposite Calvert Station,  
BALTIMORE.

**POOLE & HUNT,**

IRON FOUNDERS and general MACHINISTS, Manufacturers of STEAM ENGINES, MILL GEARING, RAILROAD CARS and CAR WHEELS, Blowing Machinery, Hydraulic Presses, Sugar and Saw Mills, MACHINISTS' TOOLS of all kinds, Shafting, Pinions and Hangers, Steam Boilers, Water Tanks, &c.—Castings made every day.

**Railroad Iron.**

THE Undersigned, having made arrangements abroad, are prepared to contract for the delivery of Foreign rails, of approved brands upon the most favorable terms.

They will also make contracts for American rails, made at their Trenton Works, from Andover Iron, in whole or in part, as may be agreed upon.

They are prepared to furnish Telegraph, Spring and Market Wire; Braziers and Wire Rods; Rivets and Merchants Bars to order, all made exclusively from Andover Iron. The attention of parties who require Iron of the *very best quality* for special purposes, is respectfully invited.

COOPER & HEWETT  
17 Burling Slip, New York

**For Sale.**

BY the Baltimore and Ohio Railroad Company, 24 crate cars adapted to railroad purpose, which will be sold at a reasonable price. For further information, apply to

SAMUEL J. HAYES,  
M. of M., Baltimore and Ohio R. R. Co.,  
19 tf  
W. BRIDGES & BRO.,  
64 Courtland st., New York.

**Philadelphia, Wilmington & Baltimore Railroad.**

**UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.**

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am, 12 45, 3 and 11 pm.

**FARE BY THROUGH TICKETS TO THE SOUTH.**

From New York to Wilmington.	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington.	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	8 00

**FARE BY THROUGH TICKETS TO THE WEST.**

From New York to Cincinnati.	\$13 50
do do Louisville	14 50
From Philadelphia to Cincinnati	11 00
do do Louisville	12 00
From New York to Indianapolis.	16 00

An extra charge will be made for meals and state rooms on board the boats.

S. L. SPAFFORD,  
General Sup't.

27tf

July 13, 1854.

REEVES, BUCK & CO.,  
No. 45 North Water Street, Philadelphia.

28.6m.

**RAILROAD CAR GREASE.**  
James Bayes & Co.,

6 MINOR STREET,

PHILADELPHIA.

MANUFACTURERS OF

SOFT WHITE GREASE,

For Coal and Freight Cars, Heavy Machinery, etc., etc.,

STIFF WHITE GREASE,

For Water-Wheel Gudgeons, Heavy Bearings, Rollers on Inclined Planes, OMNIBUSES, WAGONS, AND OTHER CARRIAGES,

In Cans, Kegs, and Barrels.

SUPERIOR YELLOW GREASE,

For Passenger Cars, etc., etc.

THE above different kinds of Grease, having been in use for some time past on several Railroads in the United States, can be confidently recommended for their general usefulness and economy.

49 ff

SAMPLE FORWARDED UPON APPLICATION.

**To Land Claimants in Texas.**

If you have any business in relation to Lands in Texas address I. W. B. STOUT, Clarksville, Red River County, Texas, and it will be attended to promptly.

The most magnificent work on Mechanical Engineering yet published in this country—

JOHN WILEY, 167 Broadway,  
publishes this day,

No. 1.

**AMERIC'N ENGINEERING,**

ILLUSTRATED BY LARGE AND DETAILED DRAWINGS, embracing the various branches of MECHANICAL ART. STATIONARY, MARINE AND LOCOMOTIVE ENGINES, MANUFACTURING MACHINERY, PRINTING PRESSES, TOOLS, GRIST, STEAM PAN, and ROLLING MILLS, IRON BUILDINGS, &c., of the most approved construction.—By G. WEISSENBORN, Engineer. The drawings in all cases to be of American Machinery actually constructed.

ILLUSTRATIONS of iron machinery, of new inventions of all kinds, have long been common; but they have been generally limited to wood-cuts of inferior size and value, and have been accompanied by general, rather than minute definition of particulars. Practically they were of no use to the builder or machinist, being too small to illustrate the work, and not sufficiently definite in their details to assist materially in the projection of larger ones. It is proposed in this work to obviate these difficulties by presenting large and handsomely executed engravings, from correct drawings. These drawings will be both in large and detailed views, accompanied by such descriptions as will enable the machinist to fully comprehend them, and reproduce the machine without further aid.

This work is to be issued in monthly numbers, and will embrace in each two plates, 24 by 30 inches, four plates, 24 by 15 inches, illustrating minutely the choicest designs in Mechanical Art. The subject of the designs illustrated will be so arranged that six parts will be complete in themselves.

Each succeeding number will be promptly issued on the first of each month. Price each \$1.00. [3.4t]

**Boiler and Tank Rivets,****Nuts and Washers;**

All Sizes of

**Bolts and Bolt Ends**

for Sale by  
BRIDGES & BROTHER,  
64 Courtland st., N. Y.

**Locomotives for Sale.**

THE Subscriber offers for sale the following Locomotives and Tenders, suited for a 5 feet gauge.

One very superior 18 ton *Passenger Engine*. Driving Wheels, 5½ feet diameter with 8 wheel tender.

One very superior 16 ton *Freight Engine*. Driving Wheels, 4 feet diameter with 8 wheel Tender.

The above machines are from one of the best shops in the country, built and finished in the best manner, and can be delivered in ten days from receipt of order. To any company in want of such machines, these are recommended.

For Price, terms, &c., apply to THOS. M. CASH,  
Philadelphia Railway Agency.  
No. 80 South Fourth st.

PHILADELPHIA.

49 8t

**Ontario, Simcoe & Huron R.R.**

CANADA.

THIS road opened in May last to Lake Simcoe is expected to be completed to the Georgian Bay, Lake Huron a distance of 96 miles in June next where it will form the shortest and most agreeable route to the North Western States to Lake Michigan and to the Mineral Regions of Lake Superior.

At present the Passenger Trains leave Toronto for Barrie (64 miles) daily at 8 a.m. and 3. 30 p.m., returning the same day—On the opening of the navigation a Steamer will ply on Lake Simcoe in connexion with the Trains and will convey passengers through that Lake and Lake Couchiching to Orillia whence a short portage of eighteen miles will take them to the waters of Lake Huron to the Steamer (Kalolah) which runs to the Sault St. Marie and intermediate ports forming the most expeditious and agreeable route to the Mineral Regions of Lakes Huron and Superior.

Arrangements will be made on the completion of the road to the Georgian Bay for a line of first class Steamers to extend their rips to the ports on Lake Michigan.

ALFRED BRUNEL,  
Superintendent.

**Railroad Iron Wanted.**

THE Undersigned invites proposals till the 27th day of February next, for the supply of about nine (9) thousand tons of heavy iron, for the "Norfolk and Petersburg Railroad."

Delivery to be made at Norfolk, Virginia, between the first of November next and the middle of June following, and at the rate of twelve (12) hundred tons per month.

It is contemplated to use Latrobe's three-part (compound) rail, and bids are solicited, based upon a supply of it and of the U pattern also.

WILLIAM MAHONE,  
Chief Eng'r N. & P. R. R. Co.  
Engineer Office, NORFOLK, Jan'y 1, 1855. 2.6t

**New York and Erie R. R.**

On and after Monday, Dec. 25th, and until further notice  
PASSENGER TRAINS  
 will leave Pier foot of Duane street,  
as follows, viz:—

BUFFALO EXPRESS, at 7 a.m. for Buffalo.

DUNKIRK EXPRESS, at 7 a.m. for Dunkirk.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at any station between Binghamton and Corning, and proceed the next morning.

WAY PASSENGER, at 4 p.m., via Suffern for Piermont and intermediate stations.

NEWBURGH EXPRESS, at 4 p.m. for Newburgh.

WAY PASSENGER, at 4 p.m., for Otisville, and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

On Sundays only one Express Train—at 5 p.m.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

47 tf. D. C. McCALLUM, General Sup't.

**Railroad Iron.**

CONTRACTS for Rails, at a fixed price or on commission delivered at an English port, or at a port in United States will be made by the undersigned.

THEODORE DEHON,  
10 Wall st., near Broadway, New York.  
500 tons T rails on hand 54 to 57 lbs. per linear yard. 1.6m.

**BUFFALO CAR COMPANY.**

THIS Company having now completed their extensive Car Works are filling orders for the construction of PASSENGER, BAGGAGE, PLATFORM and CATTLE CARS of the most approved style and finish. The works have connections with the various lines of railway east and west, which gives them all required facilities for the delivery of cars in every direction.

Orders are respectfully solicited, address to the  
BUFFALO CAR COMPANY,  
Office 37 Pearl st., Buffalo, N. Y.

**The Lowell Machine Shop**

CONTINUES to manufacture to order, FREIGHT and PASSENGER LOCOMOTIVES of different classes, with the most modern improvements.—

also MACHINISTS' TOOLS, especially adapted to Railroad Repair Shops, and to the construction of machinery generally. These Tools are of the most approved construction and consist in part of Engine Lathes, Hand Lathes, Vertical Drilling Lathes, and Planers of various sizes and lengths, Compound Planers, Shaping Machines, Slotting Machines, Bolt and Nut Machines, Gear Cutting Engines, Chucks, Compound Slide Rests, Machines for boring Crank Pin Holes in Locomotive driving wheels, Trip hammers, &c., &c.

COTTON MACHINERY of all descriptions, BOILERS, SHAFTING and MILL WORK, CASTINGS, and all work usually done in Machine Shops and Foundries.

WILLIAM A. BURKE, Sup't, Lowell, Mass.  
J. T. STEVENSON, Treasurer, 5 Tremont st., Boston.

**For Sale.**

THE ROSSIE FURNACE AND FOUNDRY, &c., St. Lawrence County, N. Y.—This well known establishment, having attached to it a large and complete Casting House and Machine Shop, with ample accommodations for workmen, and every convenience necessary to the prosecution of an extensive business, together with valuable Iron Mines and Mining Rights, also Timber Lands, is offered for sale by the proprietor, who retires from the business. The capacity of the Rossie Furnace for making iron, is believed to be unsurpassed by any charcoal Furnace in the country, having repeatedly run up to fourteen tons per day, with 55 to 60 per cent. yield from ores—specular red oxides—coal, per ton, 100 bushels. The same has been in uninterrupted operation for over twenty years, and the reputation of its iron is established throughout the West. The location of these works is in the village and town of Rossie, county of St. Lawrence, N. Y., six miles from the River St. Lawrence, and connected therewith by a plank road. Their cost, apart from premises and water power, has involved an expenditure of over \$100,000, and their present efficiency, in every respect, is considered unexceptionable. For further information apply to D. W. Baldwin, Agent, at the works, or to the undersigned.

G. PARISH.  
Ogdensburg, N. Y., April, 1853. 5.3ms.

**Winans' Variable Exhaust.**

Baltimore, December 26, 1854.

Mr. H. V. POOR, Ed. RAILROAD JOURNAL.

SIR,

I beg leave to inform you that there was granted to me on the 20th November last, an extension for seven years from the 26th November, 1854, of the Letters Patent heretofore granted to me on the 26th day of November, 1840—for an "improvement in the mode of regulating the Waste Steam in Locomotive Engines," usually known as the VARIABLE EXHAUST.

Without encumbering this notice with the specification at length, I subjoin below the claim thereof,

And remain, very respectfully,  
Your obedient servant,

ROSS WINANS.

"As already observed, there may be many contrivances for opening and closing the orifices of the pipes, besides the two above described; these two, however, will answer the purpose, and illustrate my object. I do not claim the plan of increasing the natural draught, by causing the steam from the cylinders to enter the chimney through diminished orifices, but I do claim as my invention, desiring to secure the same by Letters Patent, the plan of increasing or diminishing the force with which the Steam from the cylinders enters the chimney, at the PLEASURE OF THE ENGINE-MAN, WHILE THE ENGINE IS IN USE OR MOTION, by enlarging or contracting the orifices of the escape pipes, increasing or diminishing thereby at PLEASURE the draught of the chimney, in the manner above set forth; not intending by this claim to limit myself to the precise arrangement of the respective parts, as herein described, but to vary the same as I may think proper, whilst I attain the same end by means substantially the same."

Witnesses:

THOS. P. JONES,  
GEO. WEST.

4.4t.

**British Advertising Agency.**

ADVERTISEMENTS and Communications received for all the London, Provincial and British Colonial Newspapers, by the undersigned at their Office, 11 Clements Lane, Lombard st., London. ALGAR & STREET. English Newspapers supplied.

**VIRGINIA****Locomotive and Car Manufacturing Company,**

ALEXANDRIA, VA.

T. PERKINS, Pres't. R. C. SMITH, Treas'r.  
MANUFACTURE LOCOMOTIVE ENGINES, CARS  
OF EVERY DESCRIPTION, STATIONARY EN-  
GINES & BOILERS, CHILLED CAR WHEELS AND  
AXLES. 11

EDDY'S

**Patent Car Locomotive and Tender Wheels.**

GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies throughout the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they undergo no annealing process which gives them a deeper and harder chill than those of any other manufacturer.

2.1t. W. F. SHATTUCK, G' Ag't, 229 Broadway, N. Y.

**Lithography.**

G. WEISSENBORN, Civil Engineer and draughtsman 131 Fulton St. up stairs; also gives his attention to the engraving of maps, and machinery on stone. Locomotives are neatly lithographed at this establishment on the most reasonable terms.—Orders are solicited.

**Railroad Iron.**

500 TONS No. 1 Glengarnock Scotch Pig Iron in lots to suit purchasers for sale by NAYLOR & CO., 99 and 101 John st. N. B.—The above Iron constantly imported. 32 t.

**SEPTIMUS NORRIS,**

CIVIL, MECHANICAL & CONSULTING ENGINEER  
OFFERS his services to Railroad Companies and Engineers, to provide them with Plans and Proportions of Locomotives for burning coal or wood; calling the attention of Engineers and Railroad Managers to his *New Patent Boiler for burning Anthracite Coal*; also Plans for Depot Buildings, Railroad Tools, and all kinds of Machinery appertaining to Railroads; he will also superintend personally the construction and building of any Locomotives they may order, in this or any other city, so as to insure the Companies receiving good machines and faithful workmanship.

Having been engaged for many years professionally as Engineer upon many of our most important Roads, in their Location, Building and Equipment, and for the last 20 years practically engaged in the Manufacture of Locomotives, feels satisfied, he can save the Companies who may think proper to engage his services, many dollars, and loss by receiving imperfect machines, which have been built and put together hastily.

Address to No. 28 Summer st., Philadelphia.

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OF  
ENGINEERS AND MECHANICS,  
Public Square, Cleveland, Ohio.  
E. NUGENT, C. E., Principal.

THE design of this Institution is to afford young men an opportunity of acquiring a knowledge of the profession of Civil Engineering, and to Mechanics and Tradesmen a sound theoretical and practical knowledge of Mathematics, Architectural and Mechanical Drafting, Plain and Ornamental Penmanship, &c.

For further particulars address the Principal.

**PHILADELPHIA RAILWAY AGENCY  
AND****General Furnishing Depot  
OF ALL ARTICLES REQUIRED BY  
RAILROAD COMPANIES,**

No. 80 South Fourth street,

**PHILADELPHIA.**

Railroad Chairs, Railroad Spikes, Car Wheels, Car Axles, Bolts and Tank Rivets, Bolts, Nuts, Washers, Car Lanterns and Lamps, Conductors' Lanterns, Car Findings &c., &c.,

ALL orders promptly filled at manufacturers' prices and forwarded with despatch. Particular attention paid to contracting for Locomotives, Cars, Railroad Iron, &c.

The subscriber being Agent for several manufacturers of Machinists' Tools is enabled to furnish Railroad Companies with Lathes, Planing Machines, Drills, &c., of the best quality at manufacturers' prices.—Orders solicited

50 ly

THOS. M. CASH.

**SEYMOUR, MORTON & CO.,  
GENERAL RAILROAD AGENCY,  
Office, Metropolitan Bank Building, No. 110 Broadway.**

HAVE to dispose of at private sale, in amounts to suit persons desiring to invest, the following valuable Securities:

LOUISVILLE CITY BONDS, at 30 years.

OHIO AND MISSISSIPPI R. R. STOCK, drawing interest. MAYSVILLE AND LEXINGTON MORTGAGE BONDS, at 24 years.

MAYSVILLE AND LEXINGTON R. R. STOCK. SCIOTO AND HOCKING VALLEY R. R. STOCK. SCIOTO AND HOCKING VALLEY R. R. FIRST MORTGAGE CONVERTIBLE BONDS.

LOUISVILLE AND NASHVILLE R. R. STOCK. BUFFALO AND STATE LINE R. R. BONDS.

They are prepared to negotiate contracts for the construction and equipment of railroads in any part of the country, including furnishing corps of engineers and contractors, locomotive engines and cars, railroad bridges, McCullum's Patent, railroad iron, chains, pikes, switch irons, &c., &c.

**Hammitt's Patent Reclining Car Seat**

for Night or Day Travelling.

THE subscriber, having been appointed sole agent for the sale of this Seat, begs to call the attention of Railroad Officers to this valuable improvement for comfort in Railroad Travelling. They can now be furnished at about the same cost as the ordinary car seat, and with the manufacturer's present arrangement, they occupy but little more space in the car.

THOS. M. CASH,

406ms No. 80 South Fourth st., PHILADELPHIA.

**Edge Tools.**

THE Underhill Edge Tool Company manufacture from the best of Steel, and Warrant every variety of Edge Tools for the New England, Southern and Western trade, including Axes, Adzes, Picks and Chisels; all of which are constantly kept on hand at their Warehouse, 63 Kilby street, Boston.

December 18, 1852. WM. S. SAMPSON, Agent.

**To Engineers, Architects and Draughtsmen.**

THE undersigned begs respectfully to inform Gentlemen in the above professions, that he has constantly on hand a great variety of instruments for Field and Office use.

JAS. PRENTICE,

Feb. 9, 1853. 1 Chamber street, New York.

**ENGINEERS.**

**Atkinson, T. C.,**  
Mining and Civil Engineer,  
Alexandria, Va.

**Barnes, Oliver W.,**  
Chief Eng. Pittsburg and Connellsville R.R. Co., Pittsburg, Pa.

**Edward Boyle,**  
Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York  
Office 123 Chambers st.

**Clement, Wm. H.,**  
Little Miami Railroad, Cincinnati, Ohio.

**Cozzens, W. H.,**  
Engineer and Surveyor, St. Louis, Mo.

**Alfred W. Craven,**  
Chief Engineer Croton Aqueduct, New York.

**Charles W. Copeland,**  
Steam Marine and Railway Engineer,  
64 Broadway, New York.

**Davidson, M. O.,**  
Civil and Mining Engineer, Baltimore, Md.

**C. Floyd-Jones.,**  
Division Engineer 3d and 12th Divisions.  
ILLINOIS CENTRAL RAILROAD.  
Vandalia, Ill.

**Gay, Edward F.,**  
Civil Engineer, Philadelphia, Pa.

**Gilbert, Wm. B.,**  
Syracuse and Binghamton Railroad, Syracuse, N.Y.

**Gzowski, Mr.,**  
St. Lawrence and Atlantic Railroad, Toronto, Canada.

**Grant, James H.,**  
New Orleans and Nashville R. R., Niccoack, Tenn.

**Holcomb, F. P.**  
Chief Eng. Augusta and Waynesboro, and Savannah and  
Savannah Railroads, Macon Co., Ga.

**S. W. Hill,**  
Mining Engineer and Surveyor, Eagle River,  
Lake Superior.

**Huger, T. P.,**  
Northeastern Railroad, Charleston, S. C.

**D. Mitchell, Jr.,**  
Chief Engineer Pittsburgh and Steubenville, and Chartiers Valley  
Railroads, Pittsburgh, Pa.

**Samuel Mc Elroy,**  
Assistant Engineer, New York Navy Yard.

**Mills, John B.,** Civil Engineer,  
Sackets Harbor and Saratoga R. R., 24 William St., N. Y.

**Morris, Ellwood,**  
Engineer and Agent DAUPHIN & SUSQUEHANNA CO.,  
Cold Spring, Lebanon Co., Pennsylvania.

**Septimus Norris,**  
Civil and Mechanical Engineer, Philadelphia.

**Sam'l. & G. H. Nott,**  
Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

**Osborne, Richard B.,**  
Civil Engineer, Office 73 South 4th st., Philadelphia.

**Prichard, M. B.,**  
East Tenn. and Georgia Railroad, Knoxville, Tenn.

**W. Milnor Roberts,**  
Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

**Shanly, Walter,**  
Chief Engineer Bytown and Prescott Railway,  
Prescott, Canada.

**Roberts, Solomon W.,**  
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

**Sanford, C. O.,**  
South Side Railroad, Virginia.

**Straughan, J. R.,**  
Ohio and Indiana Railroad, Bucyrus, Ohio.

**Steele, J. Dutton,**  
Pottstown, Pa.

**Charles B. Stuart,**  
Civil Engineer, New York.

**Edward W. Serrell,**  
Civil Engineer, 157 Broadway, New York.

**Trautwine, John C.,**  
Civil Engineer and Architect, Philadelphia.

**Troost, Lewis,**  
Alabama and Tennessee Railroad, Selma, Ala.

**A. B. Warford,**  
Chief Engineer, Susquehanna Railroad, Harrisburg Pa.

**Whipple, S.,**  
Civil Engineer and Bridge Builder, Albany, N. Y.

**Wm. J. Young**  
HAS removed his Engineering and Surveying Instrument Manufactory to No. 33. North Seventh Street, Philadelphia.

**BUSINESS CARDS.****Railroad Instruments.**

**THEODOLITES, TRANSIT COMPASSES AND LEVELS**  
on a new principle, with Fraunhofer's Munich Glasses, Surveyors' Compasses, Barometers, Chains, Drawing Instruments, etc., all of the best quality and workmanship, for sale at unusually low prices by

E. & G. W. BLUNT,  
New York, Dec. 1, 1851.  
No. 179 Water street.

**James Herron, Civil Engineer,**  
OF THE UNITED STATES NAVY YARD,  
PENSACOLA, FLORIDA.,

PATENTEE OF THE

**HERRON RAILWAY TRACK**  
Models of this Track, on the most improved plan may be seen at the Engineer's office of the New York & Erie Railroad

**W. G. ATKINSON,**  
MINING ENGINEER, SURVEYOR AND DRAFTSMAN  
CUMBERLAND, MARYLAND,  
Will attend to business in his Profession in the Coal Region and vicinity.

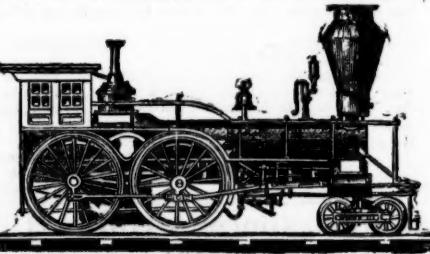
REFERENCES:  
Jerry Copes, Esq., New York.  
Col. Wm. Young, do.  
Jas. W. McCullough, Esq., late U. S. Treas., Washington.  
June 25, 1853.

**H. SAWYER**

(of the late firm of SAWYER & HOBBY,  
Manufacturer of Transits and Levels,

HAS removed to Union Place near Warburton Av., Yonkers, N. Y.

**J. S. Sewall,**  
CIVIL ENGINEER,  
ST. PAUL MINESOTA.

**LOCOMOTIVE ENGINES.****THE AMOSKEAG MANUFACTURING COMPANY,  
at MANCHESTER, N. H.,**

MANUFACTURE LOCOMOTIVE ENGINES of every description, and of the most approved patterns, at short notice. Also, STATIONARY STEAM ENGINES, Boilers, Cotton and Woolen Machinery, Tools, Turbine Wheels, Mill Work, and Castings of every description. Address

W. AMORY, Treasurer, C. W. BALDWIN, Agent,  
5th St. 65 State St., Boston, Mass. Manchester, N. H.

**Faggotted Car and Engine Axles**

FORGED BY RANSTEAD, DEARBORN & CO., BOSTON,  
Mass. These Axles are drawn from the faggot entirely by the hammer, and are all warranted.